

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions in the Telecommunications Act)	
of 1996)	

COMMENTS OF U S WEST, INC.

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SUMMARY

In addressing the issues in this proceeding, the Commission should recognize that mandatory sharing of incumbent LEC facilities entails serious economic costs and has the substantial potential to impair competition rather than promote it. As the Supreme Court's decision in *Iowa Utilities Board* confirms, Congress understood that fact in establishing a statutory framework under which only selected elements of the incumbent's network would be subject to compulsory unbundling. By including section 251(d)(2) in the Act, Congress sought to limit the unbundling requirement of section 251(c)(3) to those elements as to which the competitive benefits of compulsory unbundling will exceed the competitive costs. The Commission should interpret and apply section 251(d)(2) in light of this procompetitive goal.

Proprietary network elements are subject to the Anecessary test of section 251(d)(2)(A). All other network elements are subject to the Aimpair test set forth in section 251(d)(2)(B). By its plain language, section 251(d)(2)(B) asks only whether an entrant can feasibly provide service without access to an incumbent's network element, not whether it would simply be more expensive for an entrant to do so. Consistent with this statutory language, the procompetitive purposes of the Act, and the Supreme Court decision, the Commission should articulate the Aimpair test as follows:

*Failure to provide access to an incumbent's network element
Aimpairs an entrant's ability to provide service when the element
(or a functional substitute) is unavailable from non-ILEC sources
or is available from such sources only at prices or on terms that
would preclude meaningful opportunities for competitive entry by
an efficient competitor.*

This articulation of the Aimpair test is an objective standard: It focuses on whether competitive entry by an *efficient competitor* is feasible without compelled access to the incumbent's element,

not whether such competitive entry is feasible for a specific *individual* new entrant with a particular business plan. In addition, the test cannot be satisfied merely by showing that it would be less expensive or otherwise more convenient for a new entrant to use the ILEC's element; rather, the question is whether there is a market failure such that lack of access would so increase costs as to preclude meaningful competitive entry.

The Commission, in applying this Aimpairment≡ test, should adopt uniform nationwide rules as to some elements and nationwide presumptions as to others. A uniform national rule stating that an element either is or is not subject to section 251(c)(3) would be appropriate for network elements as to which availability does not vary by geography or market. However, where the availability of an element does vary, the Commission should adopt rules that can accommodate the competitive conditions in particular markets. The Commission can achieve such a tailored approach without sacrificing administrability by adopting a set of presumptions, to be applied by states in section 252 proceedings, that presumptively require (or do not require) unbundling of an element where particular objective geographic or demographic conditions are met.

In developing such rules and presumptions, the Commission should rely heavily on the record of actual competition in the three years since enactment of the 1996 Act. Such real-world evidence is the best source of information on what competitors need and do not need in order to compete. The burden of proof should be on CLEC proponents of mandatory unbundling, both because mandatory unbundling is a departure from the normal operation of a competitive marketplace and because CLECs have unique access to market evidence concerning the costs and terms on which they can obtain elements from non-ILEC sources.

Based on the evidence presented in these comments, the attached *de Fontenay Report*, and the *UNE Fact Report*, U S WEST proposes the following rules and presumptions with respect to specific network elements.

1. Loops: The Commission should require loop unbundling nationwide, with an exception for high-capacity facilities. For facilities operating at transmission speeds of DS1 or higher, the Commission should adopt a presumption that no unbundling is required: CLECs can and do deploy their own fiber to provide services to the businesses and other high volume customers served by such facilities.
2. Network Interface Devices (NIDs): The Commission should treat the NID as part of the loop, requiring unbundling wherever ILECs are required to unbundle their loops.
3. Switching: The fact that CLECs compete in many areas using non-ILEC switching demonstrates that, at least in those areas, lack of unbundled access to the ILEC=s switches does not preclude meaningful opportunities to compete. At a minimum, therefore, the Commission should adopt a presumption that any ILEC circuit switch within a 50-mile radius of one or more CLEC circuit switches (or packet switch providing voice services) should not be unbundled.
4. Signaling: The equipment that a CLEC needs to establish its own signaling network is available on a competitive basis from multiple vendors, and a limited investment in this equipment allows a CLEC to provide signaling over a very large area. On the other hand, each ILEC switch is associated with only one signaling network. Therefore, the Commission should require an ILEC to unbundle signaling only for those CLECs that obtain switching from the ILEC.
5. Interoffice Transmission Facilities: As a result of widespread deployment of fiber by non-ILECs, interoffice transmission facilities are widely available on a competitive basis. Where competitive alternatives for interoffice transport are available, the Commission should not require ILECs to unbundle their transport facilities. Specifically, the Commission should adopt a presumption that ILECs do not have to unbundle interoffice transmission facilities to or from wire centers that both (a) serve 20,000 or more loops, and (b) have one or more collocated CLECs.
6. Operator and Directory Assistance Services: The Commission should not impose any unbundling requirements for operator and directory assistance

services because ILECs have no market power or advantage over CLECs in the provision of these services.

7. Advanced Services: The advanced services market is open to competition; indeed, CLECs are already in the forefront of the provision of these services. Therefore, the Commission should not impose any unbundling obligations for facilities used solely in the provision of advanced services.

In light of the rapid pace of change in the telecommunications industry, these rules and presumptions will need to be modified over time. In particular, technological innovation almost certainly will make entry without access to ILEC elements substantially easier in the future than it is now. Therefore, the Commission should establish procedures and mechanisms to sunset or otherwise modify unbundled access requirements in a timely fashion as circumstances change.

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U S WEST, Inc. (AU S WEST≡) hereby submits these comments in response to the Commission=s Second Further Notice of Proposed Rulemaking.^{1/} U S WEST respectfully suggests that the Commission adopt the principles, presumptions, and other mechanisms described below to implement section 251(d)(2) of the 1996 Act.

I. PRINCIPLES THAT SHOULD GUIDE THE COMMISSION=S INQUIRY

A. The Procompetitive Role of Section 251(d)(2)

^{1/} *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, Second Further Notice of Proposed Rulemaking, FCC 99-70 (rel. April 16, 1999) (A*Second FNPRM*≡).

The overriding goal of the Telecommunications Act of 1996 (A1996 Act \equiv) is to promote competition in telecommunications markets. As the Commission has recognized in a variety of contexts^{1/} X and as demonstrated in this proceeding by the affidavit of Jerry A. Hausman and J. Gregory Sidak^{1/} X promoting *competition* is not the same thing as aiding *specific competitors*. Consistent with this well-established principle, the statutory framework Congress established in section 251 is intended to advance competition and improve consumer welfare

^{2/} See, e.g., *Access Charge Reform*, 12 FCC Rcd 15982, 16060 & 180 (1997) (A[O]ur rules should promote competition, not protect certain competitors. \equiv); *Amendment of Part 90 of the Commission=s Rules To Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band*, 12 FCC Rcd 9972, 10001 & 96 (1997) (rejecting suggested eligibility limitations Abecause it confuses protecting individual competitors with promoting competition \equiv); *Bell Atlantic Mobile Systems, Inc. and NYNEX Mobile Communications Company*, 12 FCC Rcd 22280, 22288 & 16 (1997) (AOur statutory duty is to protect efficient competition, not competitors. \equiv).

^{3/} See Affidavit of Jerry A. Hausman and J. Gregory Sidak at && 56-72 (A*Hausman & Sidak Affidavit* \equiv) (submitted on behalf of the United States Telephone Association (AUSTA \equiv)).

generally, not to help or hinder any specific competitor or type of competitor.^{4/} Thus, the ultimate standard by which the Commission should measure progress under the 1996 Act is whether consumers are benefitting from competition, *not* whether a certain number of carriers have entered a market or whether every competitor is profitable.

^{4/} See H.R. Conf. Rep. No. 104-458, at 1 (1996), *reprinted in* 1996 U.S.C.C.A.N. 124, 124 (stating that the 1996 Act Aopen[s] all telecommunications markets to competition≡ as a *means* of bringing Aadvanced telecommunications and information services to all Americans≡).

Section 251(d)(2) plays a crucial role in this statutory framework. While government-imposed requirements to share facilities always will be in the best interest of the specific competitors that seek to take advantage of such requirements, the effect on *competition* is mixed. Under certain conditions, government-managed sharing of facilities can benefit competition by offering a way to circumvent entry barriers, enabling new competitors to enter the market sooner and in greater numbers than they otherwise might. On the other hand, government-managed sharing also entails real economic costs and in many cases hinders competition more than it helps. Indeed, as the attached report prepared by de Fontenay, Savin & Kiss (*Ade Fontenay Report*≡) demonstrates, CLECs entering the market typically have decided *against* relying on incumbent elements because they recognize that robust competition requires having their own facilities so they can differentiate their services and develop new ones. Section 251(d)(2) is intended to limit the sharing requirement of section 251(c)(3) to those limited market situations in which the competitive benefits of mandated sharing outweigh these types of competitive costs.^{5/}

^{5/} See, e.g., *AT&T Corp. v. Iowa Utils. Bd.*, 119 S. Ct. 721, 753-54 (1999) (Breyer, J., concurring in part and dissenting in part) (A[T]he statute=s unbundling requirements, read in light of the Act=s basic purposes, require balance. Regulatory rules that go too far, expanding the definition of what must be shared beyond that which is essential to that which merely proves advantageous to a single competitor, risk costs that, in terms of the Act=s objectives, may make the game not worth the candle.≡).

The competitive costs of mandatory sharing include diminished incentives for incumbents to invest in the maintenance and improvement of their facilities and inefficiencies and delays associated with having regulatory proceedings, rather than market forces, determine the terms on which facilities may be obtained. Justice Breyer discussed these costs at length in his concurring opinion in *Iowa Utilities Board*:

[C]ompulsory sharing can have significant administrative and social costs inconsistent with the Act=s purposes . . . Even the simplest kind of compelled sharing . . . means that someone must oversee the terms and conditions of that sharing. Moreover, a sharing requirement may diminish the original owner=s incentive to keep up or to improve the property by depriving the owner of the fruits of value-creating investment, research, or labor. . . . The more complex the facilities, the more central their relation to the firm=s managerial responsibilities, the more extensive the sharing demanded, the more likely these costs will become serious. And the more serious they become, the more likely they will offset any economic or competitive gain that a sharing requirement might otherwise provide.^{6/}

In addition, sharing requirements diminish the incentives of competitors to develop facilities and systems that could serve as true alternatives to those of the incumbent. As Justice Breyer observed, an overbroad sharing requirement artificially narrows the scope of competitive efforts and, in the case of an unlimited sharing requirement, drains Acompetition≡ of virtually all substantive effect.

It is in the *unshared*, not in the *shared*, portions of the enterprise that meaningful competition would likely emerge. Rules that force firms to share *every* resource or element of a business would create, not competition, but perverse regulation, for the regulators, not the marketplace, would set the relevant terms. . . . [A] world in which competitors share every part of an incumbent=s existing system . . .

^{6/}

Id. at 753-54 (citation omitted).

is a world in which competitors would have little, if anything, to compete about.^{1/}

From an economic perspective, therefore, regulators should impose compelled sharing requirements only in highly selected circumstances. For example, where entry barriers otherwise would preclude competition, a sharing requirement may be procompetitive. However, the requirement should be narrowly tailored to overcoming those entry barriers. Moreover, a showing that entry barriers preclude the entry of particular *individual competitors* should not be sufficient. In the absence of a demonstrated competition-related need, sharing should not be required.

^{1/} *Id.* at 754; see also *The Telecommunications Act of 1996: Moving Toward Competition under Section 271, Hearing before the Subcomm. on Antitrust, Business Rights, and Competition of the Senate Comm. on the Judiciary*, S. Hrg. 105-565, at 64 (Mar. 4, 1998) (testimony of WinStar CEO William Rouhana, Jr.) (ALet me . . . tell you that I think there are really two important things that need to be done in order for there to be meaningful local competition. First and foremost, I really do think we need alternate facilities. I do not believe that resale or the use of the Bell Company facilities truly creates the environment that was intended by the Act. It does not stimulate the kind of competition that brings innovative services to consumers, that takes maximum advantage of technology, and that is one of the things I think we really need to do.≡).

The Supreme Court decision in *Iowa Utilities Board* confirms that the 1996 Act recognizes these principles, using section 251(d)(2) to place definite limits on the scope of the unbundled access requirement of section 251(c)(3). The Court rejected the idea that Congress intended to provide relatively unrestricted blanket access to incumbents' networks.^{8/} The Court likewise repudiated the notion that the Act creates some underlying duty to make all network elements available, with section 251(d)(2) permitting but not requiring exceptions.^{9/} Instead, the Court held that section 251(d)(2) requires the Commission to be selective, imposing unbundling only where doing so would promote the procompetitive goals of the Act.^{10/}

^{8/} *Iowa Utils. Bd.*, 119 S. Ct. at 735.

^{9/} *Id.* at 736.

^{10/} *Id.* at 734-35 (A[T]he Act requires the FCC to apply *some* limiting standard, rationally related to the goals of the Act).

In particular, the Court held that the tests in section 251(d)(2) (the Necessary and Impair tests) must be given content in at least two ways. First, the tests cannot be satisfied on the basis of just any increase in cost or decrease in quality.^{11/} Rather, unbundling may be required only upon some more extensive showing of competitive need. Second, the Commission, in applying the necessary/impair tests, should consider whether competitors could obtain the element in question from sources outside the incumbent's network.^{12/} The availability of elements from other sources plainly has a significant bearing on the extent of any competitive need for government-mandated unbundled access.

In sum, both the procompetitive purposes of the 1996 Act and the Supreme Court's decision in *Iowa Utilities Board* demonstrate that, to implement section 251(d)(2) faithfully, the Commission should require unbundled access only where the Commission identifies a specific market failure that mandatory unbundling would help alleviate. Thus, if a market failure such as high entry barriers gives the incumbent market power with respect to a particular element that is sufficient to preclude meaningful competition in the provision of telecommunications service, compulsory unbundled access to that element may be appropriate. With respect to all

^{11/} *Id.* at 735.

^{12/} *Id.*

elements as to which the incumbent does not have sufficient market power to preclude meaningful competition, the Commission should allow market forces to govern.^{13/}

B. The Essential Facilities Doctrine as a Useful Guide

^{13/} Avoiding unnecessarily expansive unbundling obligations also minimizes the risk that such an obligation could be found to result in an unconstitutional taking of an incumbent's property, making the federal government liable for potentially millions of dollars.

The essential facilities doctrine of antitrust law reflects the collective efforts of courts and scholars to resolve the same type of economic and competition law issues faced by the Commission in implementing section 251(d)(2).¹⁴ X how to identify those particular cases where the competitive benefits of compulsory sharing of facilities outweigh the competitive costs. The essential facilities doctrine and the necessary/impaired standards of section 251(d)(2), while differently stated, both seek to promote increased competition and enhanced consumer welfare. Thus, although section 251(d)(2) may not have simply transplanted all the particulars of the essential facilities doctrine into section 251, the Commission can and should look to the essential facilities doctrine as a guide to determining the circumstances under which compulsory sharing is likely to serve or disserve the public interest.¹⁵

The essential facilities doctrine emphasizes that mandatory sharing serves the public interest only where access to an incumbent's facility is truly *essential* to the development of competition. Where market entry without such access is reasonably possible, scholars on the subject have concluded that compulsory access on regulated terms actually can have counterproductive effects on competition.¹⁶ Thus, as the Supreme Court has cautioned here, the

¹⁴/ See, e.g., *Iowa Utils. Bd.*, 119 S. Ct. at 753 (Breyer, J., concurring in part and dissenting in part) (Although the provision describing which elements must be unbundled does not explicitly refer to the analogous "essential facilities" doctrine . . . the Act, in my view, does impose related limits upon the FCC's power to compel unbundling.).

¹⁵/ See, e.g., Alfred E. Kahn, *Letting Go: Deregulating the Process of Deregulation* 48 (1998) (sharing requirements can in a very real sense discourage competition itself, in the name of encouraging it: if potential competitors can obtain from incumbents, at regulatorily-prescribed prices, not just facilities and services that are naturally monopolistic but any and all others X present and future X that could feasibly be supplied independently, the incentive of incumbents to innovate and of competitors to provide their own will be attenuated.); see generally Hausman &

doctrine reinforces the need for the Commission to be very careful in selecting the elements for which unbundling will be required. Section 251(d)(2), like the essential facilities doctrine, was intended by Congress to ensure that unbundling not be used to protect the profit margins and business plans of particular competitors at the expense of the public interest and competition.

C. Experience with Actual Competition

Sidak Affidavit §§ 74-82.

While the essential facilities doctrine provides helpful guidance on the *theoretical* underpinnings for a new approach to section 251(d)(2), experience with actual competition in the years since enactment of the 1996 Act provides essential *practical* indications of what non-incumbent carriers do and do not need in order to compete. In contrast to the situation at the time of the 1996 *Local Competition Order*,^{16/} the Commission now has the opportunity to examine three years of competition in the marketplace for local services. Such real-world evidence offers a far more reliable source of information about competitive conditions with respect to specific elements than any economic model or other theoretical construct possibly could. In the words of Commissioner Powell, the availability of this empirical evidence allows the Commission to build an unbundling regime from the ground up, not the top down.^{17/}

Thus, rather than merely speculating about what network elements competitors need from incumbents, the Commission should rely in the first instance on empirical evidence concerning the actual competitive behavior of the numerous CLECs that are now providing service. Such an evidence-based approach will greatly enhance the Commission's ability to make accurate determinations as to whether specific unbundling requirements would promote competition or impair it. In an effort to aid the Commission in taking this path, these comments

^{16/} *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499 (1996) (*Local Competition Order*).

^{17/} *Second FNPRM*, Statement of Commissioner Powell.

rely heavily on such empirical evidence in the form of both USTA=s *UNE Fact Report* and the *de Fontenay Report*, which reflects the authors= independent study, beginning last year, of how an actual, prospective new entrant could obtain facilities to offer telecommunications services.

Furthermore, the Commission now has available to it the experiences of other nations that have wrestled with the same fundamental economic question of how broad unbundling obligations should be. As detailed in the *de Fontenay Report*, a global approach appears to be emerging in which regulators are imposing far more limited unbundling requirements than those initially imposed by the Commission in 1996.^{1/} The Canadian Radio-television and Telecommunications Commission (ACRTC≡), for example, adopted an approach in May 1997 that largely limits unbundling obligations to loops and directory listings.^{1/} According to the CRTC, Aefficient and effective competition will be best achieved through facilities-based competitive service providers; otherwise, competition will only develop only at the retail level, with the ILECs retaining monopoly control of wholesale level distribution.^{1/} Regulators in the UK and the Netherlands also have chosen to adopt only limited unbundling obligations.^{1/} And according to one survey of international telecommunications deregulation, AChile=s *absence* of unbundling requirements . . . has helped unleash a remarkable level of competition in the provision

^{18/} See *de Fontenay Report* at 49-64.

^{19/} Telecom Decision CRTC 97-8 (rel. May 1, 1997) (A*Canadian Local Competition Decision*≡).

^{20/} *Id.* & 73; see also *Hausman & Sidak Affidavit* & 78.

^{21/} *de Fontenay Report* at 51-56.

of local services.^{22/} However necessary the need for unbundling may have appeared in 1996, the Commission should now consider carefully these emerging international perspectives on unbundling and competitive market entry as a caution against imposing a broad unbundling regime that jeopardizes the continued development of telecommunications infrastructure and facilities-based competition in the United States.

II. THE LEGAL TEST FOR DETERMINING WHETHER THE IMPAIR AND NECESSARY STANDARDS ARE SATISFIED.

Section 251(d)(2) provides that:

In determining what network elements should be made available for purposes of subsection (c)(3), the Commission shall consider, at a minimum, whether X

(A) access to such network elements as are proprietary in nature is necessary; and

(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.^{23/}

^{22/} Pablo T. Spiller and Carlo G. Cardilli, *The Frontier of Telecommunications Deregulation: Small Countries Leading the Pack*, 11 J. Econ. Perspectives 127, 137 (1997) (emphasis added).

^{23/} 47 U.S.C. § 251(d)(2).

As the Commission, the Eighth Circuit, and the Supreme Court all have recognized, this section establishes two standards. The necessary test in subsection (A) applies to network elements that are proprietary in nature.²⁴ Subsection (B) applies to all network elements generally, without qualification. Thus, section 251(d)(2) embodies a requirement that [the Commission] consider whether access to proprietary elements [is] >necessary= and whether lack of access to nonproprietary elements would >impair= an entrant's ability to provide local service.²⁵ Congress imposed a higher >necessary= standard for the unbundling of proprietary elements because it recognized that forced sharing of such elements necessarily decreases incentives to invest and innovate. Accordingly, while all elements must meet the impair test before they can be required to be unbundled, proprietary elements must meet an additional criterion in order for unbundling of such elements to be >necessary= within the meaning of section 251(d)(2).

A. The >Impair= Test

By its plain language, section 251(d)(2)(B) asks only whether an entrant can feasibly provide service without access to an incumbent's network element. The focus of this inquiry should be whether the prices and terms on which an element (or its functional substitute) is available from non-ILEC sources allow an efficient competitor to enter the market. Section 251(d)(2)(B) does not ask whether these prices and terms are better or worse than those that would be available from the incumbent; it simply asks whether they are *adequate* to permit

²⁴/ *Iowa Utils. Bd.*, 119 S. Ct. at 728; *see also Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 811 n.31 (8th Cir. 1997); *Local Competition Order*, 11 FCC Rcd at 15642-43 && 283-85.

competition.^{1/} As the Supreme Court explained, an entrant whose potential profits are merely reduced may have perhaps been impaired in its ability to amass earnings, but has not ipso facto been impaired . . . in its ability to provide the services it seeks to offer.

Accordingly, to be faithful to the statutory language, the Commission should articulate the impairment test as follows:

Failure to provide access to an incumbent's network element impairs an entrant's ability to provide service when the element (or a functional substitute) is unavailable from non-ILEC sources or is available from such sources only at prices or on terms that would preclude meaningful opportunities for competitive entry by an efficient competitor.

^{25/} *Iowa Utils. Board*, 119 S. Ct. at 735; see also *id.* at 753 (Breyer, J., concurring in part and dissenting in part) (key issue is whether a new entrant could *compete effectively* without the facility in question) (emphasis added).

This standard tracks the language adopted by the Commission itself in connection with section 251's nondiscrimination obligation. In particular, the Commission ruled that the purposes of section 251 require that network elements must be provided on terms and conditions that would provide an efficient competitor with a meaningful opportunity to compete.^{26/} The same goals underlie the determination of *what* elements must be provided: If an element is not needed to provide a meaningful opportunity for an efficient competitor to provide service, there is no reason to require that it be unbundled, particularly given the costs and distortions otherwise created by forced sharing.

1. Actual and Potential Competition as Evidence of the Absence of Impairment

In determining whether lack of access to an element will preclude meaningful opportunities for competitive entry,^{27/} the Commission should, consistent with the Supreme Court's directive, consider the practical availability of elements outside the incumbent's network.^{28/} And that task requires the examination of *all* potential outside sources of elements X other carriers, noncarrier sources (e.g., ISPs), and self-provisioning.^{29/}

^{26/} *Local Competition Order*, 11 FCC Rcd at 15660 & 315.

^{27/} *Iowa Utils. Bd.*, 119 S. Ct. at 735.

^{28/} *Id.*

In the first instance, the Commission should look to the past three years of experience of actual competition to determine which elements can be obtained from other sources. Evidence that one or more CLECs are obtaining an element in a geographic market from non-ILEC sources conclusively demonstrates that mandatory unbundling of that element is not appropriate in that market: In such a case, lack of mandatory access to the element from the ILEC clearly does not preclude meaningful opportunities for competitive entry by one or more competitors. First, the fact that at least one CLEC can self-provision in the market means that other efficient competitors should be able to do so as well. Second, even if new entrants choose not to self-provision the element, they can negotiate to lease the element (or capacity on the element) at market-based rates from either the ILEC or the facilities-based CLEC(s). Even in the absence of a *mandatory* unbundling requirement, both the ILEC and the facilities-based CLEC have strong incentives to lease their facilities at a market price.^{1/}

^{29/} See, e.g., *Hausman & Sidak Affidavit* & 73. Even if the CLEC and ILEC do not have the current capacity available to lease, they typically can economically expand capacity. *Id.* & 130. Moreover, the fact that two or more carriers are operating an element at capacity makes it almost certain that an efficient competitor could feasibly self-provision that element.

At the same time, the fact that no facilities-based CLEC is already serving a particular geographic market does not necessarily mean that alternative sources of elements are unavailable in that market. If competition is feasible without mandated sharing of an ILEC element in one market, it should be similarly feasible in other markets with the same or similar economic characteristics. The point of inquiring into what facilities CLECs have actually deployed and from whom they have obtained these facilities is to determine which incumbent-provided elements have in practice proved to be prerequisites of competitive entry and, conversely, which elements can as a practical matter be obtained and used from other sources. For example, network elements such as DSLAMs and switches are scalable and relatively inexpensive, and it may be reasonable to expect a competitor to purchase its own equipment of this sort even if no other network provider in the geographic market has done so already. Likewise, if a CLEC has obtained particular elements from non-ILEC sources in one market, then it is reasonable to at least presume that those elements are also available from non-ILEC sources in other markets with similar relevant characteristics.^{1/}

^{30/} Indeed, even in markets where it is economically infeasible to obtain an element from a non-ILEC source, that market failure may have nothing to do with an ILEC's residual market power and may instead be due to the regulatory environment. See William E. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 Harv. L. Rev. 937, 975-76 (1981). For

example, in residential markets, universal service subsidies keep prices below cost, meaning that a carrier generally may not make profits from serving just a particular residential market. But a showing that obtaining an element from a non-ILEC source to serve a particular residential market is economically infeasible (because serving the market would be unprofitable) cannot justify compelled unbundling of that element if a CLEC can then turn around and use the element to serve the business market in the same area at above-cost rates.

Put another way, the Commission should give weight not only to actual competition in particular markets, but also to *potential* competition in cases where the evidence indicates that it is possible and practical for another company to enter the market and provide a substitute facility. A[E]ven if the [incumbent=s] facility is currently the only one in its market, no competitive injury will be forthcoming if entry barriers are low.^{31/} For example, the forced sharing of the sole gas pipeline currently operating in a local market is not appropriate where it is economically feasible for other pipeline companies to extend their networks into that market.^{32/} Likewise, the fact that only an incumbent has a particular element in a given market does not mean that element is unavailable from alternative sources if it is economically feasible for an entrant to provide its own. And the fact that CLECs have self-provided that element in other similar markets strongly suggests self-provisioning is feasible.

Indeed, if CLEC deployments in similar geographic markets demonstrate that it is in fact possible to deploy substitutes for a given incumbent element, requiring unbundling will actually thwart the development of a competitive market by *discouraging* the deployment of these substitute facilities:

[E]ntry is the preferred route that will result in real competition rather than mere sharing of a monopoly. If entry in response to monopoly prices is in fact possible, then it is counterproductive for an antitrust tribunal to force the current monopolist to share its facility; the plaintiff=s right to share, particularly at judicially regulated prices, reduces or eliminates its incentive to enter by other means.^{33/}

^{31/} IIIA Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* & 773c, at 209 (rev. ed. 1996).

^{32/} See *Illinois ex rel. Burris v. Panhandle Eastern Pipe Line Co.*, 935 F.2d 1469, 1482 (7th Cir. 1991); *Illinois ex rel. Hartigan v. Panhandle Eastern Pipe Line Co.*, 730 F. Supp. 826, 927-28 (C.D. Ill. 1990).

^{33/} IIIA Areeda & Hovenkamp, *supra*, & 773c, at 209.

2. Factors of Limited or No Relevance to the Impairment Inquiry

Differences in Cost and Economies of Scale. The Supreme Court expressly ruled that the Commission may not deem every cost increase to be an impairment that justifies unbundling. Section 251(d)(2)'s language asks whether a competitor's general ability to provide service is impaired, *not* its ability to provide service profitably using any particular business plan of its choosing. Accordingly, if CLECs have in practice been able to enter the market using non-ILEC sources for a particular network element, the fact that the next entrant might find it less expensive or more convenient to use the incumbent's element does not change the reality that competition is both possible and feasible *without* compelled unbundling, regardless of any difference in cost.

The standard for forcing an incumbent to share its facilities should be an objective one, with reference to the marketplace, rather than in terms of individual rivals' subjective desires. Because the goal of section 251 is not to permit individual rivals to survive, but to make markets more competitive, forced sharing of facilities is not appropriate when actual or potential rivals *other than the plaintiff* are able to compete without the claimed facility.^{34/} A facility must be shared only when it is vital to both the plaintiff's individual competitive viability and the viability of the market in general.^{35/} As Judge Posner has explained, A[t]he policy of

^{34/} *Id.* & 773b3, at 206, 207 (emphasis added).

^{35/} *David L. Aldridge Co. v. Microsoft Corp.*, 995 F. Supp. 728, 752-53 (S.D. Tex. 1998).

competition is designed for the ultimate benefit of consumers rather than of individual competitors.^{36/} Accordingly, any difference in cost must be judged with reference to an efficient competitor, not each individual CLEC with its unique business plan.^{37/} And where one or more CLECs already are providing service by obtaining a particular element from a non-ILEC source, any cost difference for the element by definition does not preclude meaningful opportunities for competitive entry.

A corollary of this principle is that the impair test should not be set at the lowest common denominator so that *every* carrier X no matter what its size, capital, or investment in facilities X can profitably employ a UNE-based entry strategy. As Justice Breyer noted, A[r]egulatory rules that go too far, expanding the definition of what must be shared beyond that which is essential to that which merely proves advantageous to a single competitor, risk costs that in terms of the Act=s objectives, may make the game not worth the candle.^{38/} It is entirely reasonable to expect that a carrier with few customers or little capital may have to enter the market through resale first before Agraduating= to unbundled network elements. If some firms are able to compete without access to a given incumbent facility, requiring access is not appropriate, even if other rivals are too small to compete without access.^{39/}

^{36/} *Marrese v. American Academy of Orthopedic Surgeons*, 706 F.2d 1488, 1497 (7th Cir. 1983).

^{37/} *Hausman & Sidak Affidavit* && 61, 70-71.

^{38/} *Iowa Utils. Board*, 119 S. Ct. at 754 (Breyer, J., concurring in part and dissenting in part).

^{39/} *See, e.g., Olympia Equip. Leasing Co. v. Western Union Tel. Co.*, 797 F.2d 370,

379 (7th Cir. 1986) (rejecting independent equipment vendor=s claim that Western Union=s sales channels were essential facilities based on evidence that other independent vendors were able to compete without access; Western Union Ahad no duty to use its salesmen at its expense to do Olympia=s selling merely because Olympia was too weak to compete successfully against Western Union with a sales force of its own.≡).

In particular, the Aimpairment≡ test cannot be met merely by showing that lack of access to an element would prevent an entrant from taking advantage of the same economies of scale as the incumbent. The existence of a scale economy simply means that there may be a cost difference between an incumbent-provided element and the same element provided by a third party. Because an incumbent by definition is likely to enjoy greater economies of scale than a new entrant,^{40/} a regime under which all differences in economies of scale were sufficient to meet the impairment test would effectively require the unbundling of virtually every element on the basis of this cost difference. But the Supreme Court held in unmistakable terms that such a cost difference, standing alone, does not necessarily Aimpair the ability of [a] telecommunications carrier . . . to provide the services that it seeks to offer,≡ and that a rule defining Aany increase in cost[s]≡ as an impairment violates Congress=s intent.^{41/} The existence of economies of scale, without more, says nothing about whether the terms on which elements are available from non-ILEC sources are adequate to permit competitive entry.

^{40/} Conversely, an incumbent is likely to be saddled with various inefficiencies that a new entrant will not. An entrant, for example, can incorporate the most advanced and efficient equipment in its network, while an incumbent=s network may contain older, less efficient elements.

^{41/} See *Iowa Utils. Bd.*, 119 S. Ct. at 735.

By incorporating a higher standard of impairment than any increase in costs, the Telecommunications Act parallels antitrust law. Antitrust authorities consistently hold that an incumbent need not share its facility with a rival simply because it would be cheaper for the rival (whether because of economies of scale or other reasons) to use the incumbent's facility rather than that of a third party. Instead, the firm seeking access must demonstrate its inability practically or reasonably to duplicate the incumbent's facility.^{42/} To justify forced sharing, a facility must be more than an input for which the monopolist enjoys a cost advantage, lest we turn every dominant firm enjoying significant scale economies into a public utility. . . . For example, a monopolist may enjoy economies of scale in its plant, advertising, or distribution network. If scale economies are substantial, then any new rival faces higher costs than does the monopolist. Nevertheless, we would not regard the monopolist's large plant as an essential facility that must be shared with others.^{43/} The same conclusion follows in the context of section 251(d)(2): Even if an ILEC enjoys economies of scale in an element that a CLEC (at least initially) does not, those economies do not justify mandatory unbundling of the ILEC element in the absence of a showing that the CLEC simply would not have a meaningful opportunity to compete without compelled access to that ILEC element.

^{42/} *MCI v. AT&T*, 708 F.2d 1081, 1132 (7th Cir. 1982).

^{43/} IIIA Areeda & Hovenkamp, *supra*, & 773b2, at 205-06.

The unbundling of an element also cannot be justified on the basis of a difference between the cost of self-provisioning or obtaining the element from a non-ILEC source and the regulatory TELRIC price. As the Supreme Court made clear, the focus of the impair test is not whether access to an element is needed to allow the CLEC to maximize its profits. Rather, the question is whether an efficient CLEC has a meaningful opportunity to compete by obtaining the element from a non-ILEC source, even if the TELRIC price might be cheaper. The answer to that question has little to do with the TELRIC price of an element, because, under the Commission's methodology, TELRIC is *not* a reflection of the ILEC's actual costs of its real network, but of a hypothetical network using the most efficient technology available.^{44/} In other words, the ILEC's cost is by definition almost certain to be higher than the TELRIC price. As a result, the fact that a CLEC's costs also may be higher than TELRIC if it obtains an element from a non-ILEC source provides little or no information about whether the CLEC can meaningfully compete with the ILEC or with other carriers.

Finally, mandatory unbundling generally cannot be justified on the theory that a CLEC will otherwise incur Asunk costs.^{45/} First, many investments in network elements, while perhaps Afixed,^{46/} do not constitute Asunk costs.^{47/} The cost of a switch, for example, may be fixed, but it is not a Asunk cost^{48/}: If a purchaser of a switch subsequently exits the market, it can sell the switch and associated software to another carrier.^{49/} Second, the presence of some sunk costs means no more than that a prospective entrant must have a certain level of capitalization in

^{44/} *Local Competition Order*, 11 FCC Rcd at 15848 & 684.

^{45/} *Hausman & Sidak Affidavit* & 84.

order to enter on a facilities basis. As discussed above, the fact that not every firm can achieve that threshold capitalization is not itself sufficient reason to find the impair test met. Of course, the risk that a CLEC might lose its sunk costs constitutes a normal risk of entry in any market and cannot be said to preclude meaningful opportunities for competitive entry by an efficient competitor² in the absence of strong evidence that the risk is so great and the potential sunk costs so high that entry is not economically feasible.

Section 271. The section 251(d)(2) inquiry is logically independent from section 271, and the fact that Congress listed a number of elements that BOCs must make available to obtain interLATA relief does not mean that the Anecessary³ and Aimpair⁴ tests may be modified to guarantee that they generate the same list. As an initial matter, unlike the section 251 unbundling obligations (which apply to all incumbent LECs whatever their market plans), section 271's list applies only to those BOCs that choose to apply for authority to provide in-region interLATA services. Moreover, elements unbundled under section 271 are not subject to TELRIC pricing. Because the two provisions apply to distinct, albeit overlapping, sets of carriers and involve different pricing schemes, it would make little sense to import the list of elements in section 271 into section 251. The more sensible reading is that Congress reasonably determined that a greater degree of unbundling than might otherwise be required should be one of the quids for the quo of in-region interLATA authority.

Moreover, section 271 itself treats the unbundling of the specifically listed elements as a separate question from what must be unbundled under section 251. Section 271(c)(2)(B)(ii) requires a BOC seeking interLATA authority to provide A[n]ondiscriminatory

access to network elements in accordance with the requirements of section 251(c)(3) and 252(d)(1).³ It then separately lists a series of elements that must be unbundled in section 271(c)(2)(B)(iii) through (vii). If Congress had expected that application of section 251's necessary and impair tests would result in the unbundling of all the specific elements listed in section 271, there would have been no need for Congress to include that specific list in the first place. Congress understood, however, that a proper application of sections 251 and 252 might not yield the unbundling of *all* the network elements that Congress thought necessary for interLATA relief; hence, it added the specific list of elements found in section 271.

Section 271 demonstrates that Congress knew how to specify a list of network elements. Determining what elements to unbundle pursuant to section 251 by reference to the list in section 271 would unlawfully reverse Congress's decision *not* to include a specific list of elements in section 251.

Combinations and the UNE Platform. The impair analysis should focus only on individual elements, not combinations of elements. In other words, the Commission should apply the impair test on an element-by-element basis. If, at the end of the analysis, two elements already combined in an ILEC's network each independently satisfy the impair test, then, under Rule 315(b), the ILEC cannot separate them. Conversely, if only one of two elements already combined in an ILEC's network satisfies the necessary/impair test, the ILEC must provide that element A in a manner that allows requesting carriers to combine [that] element[] in order to provide . . . telecommunications service.⁴ 47 U.S.C. § 251(c)(3). Accordingly, a CLEC can always combine the element it obtains from an ILEC with others that it self-provisions or obtains

from other sources to construct a network X the lack of combined elements from the ILEC will not in any way prevent the CLEC from providing service.

The unbundling of an individual element also cannot be justified on the ground that the element is needed as part of the so-called UNE platform. Indeed, as the Supreme Court's decision indicates, such an approach would assume an outcome that may very well be unjustified.

In response to ILEC arguments concerning the UNE platform, the Court stated that the whole question may well be academic in light of its necessary ruling because, if the FCC on remand makes fewer network elements unconditionally available through the unbundling requirement, an entrant will no longer be able to lease every component of the network.^{46/}

Clearly, any attempt to justify the unbundling of a particular element on the basis that it is part of the UNE platform would turn the Supreme Court's ruling inside out. Nor can the unbundling of the platform be justified on the theory that some CLECs are unable to provide any of their own facilities. Such CLECs do not need the platform to enter X they can rely on the functional equivalent of resale and gradually ramp up to obtaining their own facilities. Indeed, the fact that the Act explicitly provides resale as a competitive option makes clear that a CLEC could not be impaired (*i.e.*, precluded from meaningful opportunities to compete) by not having access to the platform. As Justice Breyer properly asked, if Congress had intended unbundling to lead to the availability of the UNE platform, would Congress have seen a need for a separate wholesale

^{46/} *Iowa Utils. Bd.*, 119 S. Ct. at 737.

sales requirement (since the "unbundling" requirement would have led to a similar result)?^{47/} The answer clearly is no.

In the end, if the Commission faithfully applies the necessary and impair tests to each individual element, CLECs will have access to the elements they need to compete X either from the ILEC or from other sources X and they will be able to combine those elements into a network from which they can provide service.

Delays in Self-Provisioning. Any delays inherent in a particular competitor self-provisioning an element, such as the time needed to set up a commercial relationship with a vendor, cannot justify mandatory unbundling for at least three reasons. First, the fact that many CLECs today are using self-provisioned facilities conclusively demonstrates that any delay from such self-provisioning does not preclude the development of competition. Second, because self-provisioning, ordering, constructing, and similar tasks by definition take a certain amount of time, any finding that this inherent delay was sufficient to constitute impairment would mean that the impair test would always be met for every element today and in the future X in other words, such a finding would gut the impair standard in much the same way as the Commission=s original rule that any cost increase or any decrease in quality was an impairment. Third, any rule taking into account delay in self-provisioning would require administratively complex determinations regarding time differences between self-provisioning and ILEC provisioning.

^{47/} *Iowa Utils. Bd.*, 119 S. Ct. at 754 (Breyer, J., concurring in part and dissenting in part).

B. The Necessary Test

Before the Commission may require the unbundling of a proprietary network element, it must conclude that access to such an element is necessary. 47 U.S.C.

§ 251(d)(2)(A). Congress adopted a higher threshold for proprietary elements in order to avoid dampening ILECs' incentives to innovate and invest. Under the necessary test, lack of access to a proprietary element must not only impair an efficient entrant's ability to provide service, but it must be impossible to provide service without that element or its functional substitute.

The necessary test in section 251(d)(2)(A) was intended to preserve and sharpen incumbents' incentives to innovate and invest in their networks. The law in the United States has always recognized the need to protect intellectual property in order to promote investment. The right of exclusivity conferred by intellectual property law provides an incentive to inventors to risk the often enormous costs in terms of time, research, and development.^{48/}

^{48/} *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480 (1974); see also U.S. Dept. of Justice & Federal Trade Commission, *Antitrust Guidelines for the Licensing of Intellectual Property* & 1.0 (1995) (The intellectual property laws provide incentives for innovation and its dissemination and commercialization by establishing enforceable property rights for the creators of new and useful products [and] more efficient processes.).

Conversely, of course, any requirement that a firm share its intellectual property with its rivals discourages it from investing and innovating. Indeed, the Commission itself recognized this very point in its *Local Competition Order*: AWe acknowledge that prohibiting incumbents from refusing access to proprietary elements could reduce their incentives to offer innovative new services.^{49/}

As a result of the harmful effects of forced sharing on incentives to invest and innovate, antitrust law universally recognizes that a much higher threshold must be met before ordering the sharing of intellectual property and network innovations. As Federal Trade Commission Chairman Robert Pitofsky recently explained, Antitrust enforcers should proceed cautiously in breaking up or mandating access to an existing network, even when that network is dominant. . . . That is particularly true when the network derives from intellectual property, a

^{49/} *Local Competition Order*, 11 FCC Rcd at 15641-42 & 282; see also *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 281 (2d Cir. 1979) (AIt is the possibility of success in the marketplace, attributable to superior performance, that provides the incentives on which the proper functioning of our competitive economy rests. If a firm that has engaged in the risks and expenses of research and development were required in all circumstances to share with its rivals the benefits of those endeavors, this incentive would very likely be vitiated.^{50/}).

concept that has traditionally influenced antitrust policy which recognizes the wisdom of encouraging innovation.^{50/}

Forced sharing of proprietary elements would be particularly destructive in the areas of new and advanced services, since that is where innovation and investment are most prevalent and vital today. Congress expressly recognized the importance of encouraging the development of new technologies and innovations by enacting section 706, which expressly commands the Commission to avoid adverse impacts on the development and deployment of advanced services. Because the ILECs are in many cases in the best position to develop and deploy such services, particularly in rural and other high cost areas, the Commission bears special responsibility not to dampen or eliminate ILECs' economic incentives to engage in such investment.

^{50/} Speech by Robert Pitofsky, Chairman, Federal Trade Commission, American Bar Association Section of Antitrust Law's Antitrust Issues in High-Tech Industries Workshop, Scottsdale, Arizona, Feb. 26, 1999 (*available at* <http://www.ftc.gov/speeches/pitofsky/hitch.htm>), *visited* May 26, 1999).

The dampening effects on innovation and investment created by forced sharing would occur with respect to all forms of intellectual property. Accordingly, the term *Proprietary* should encompass all forms of intellectual property as set forth in the Department of Justice's intellectual property guidelines X property Aprotected by patent, copyright, and trade secret law, and . . . know-how.^{51/} The category should broadly extend to elements that use any proprietary protocol, contain any proprietary information, or cannot be shared without divulging material that the incumbent would reasonably want to protect from disclosure as a trade secret.^{1/}

The term *Proprietary* also should extend to third-party proprietary interests, at least where the ILEC's own right to use, license, or otherwise transfer the element is restricted by the third-party's intellectual property interests. Depriving third parties of the right to price and control the distribution of their proprietary products will produce the same disincentives to innovation that apply to ILECs' own intellectual property.

To be faithful to Congress's purposes, the Commission should adopt the following test for unbundling proprietary elements:

^{51/} *Antitrust Guidelines for the Licensing of Intellectual Property* & 1.0.

^{52/} *See Local Competition Order*, 11 FCC Rcd at 15641-42 & 282 (recognizing that proprietary elements include Aelements with proprietary protocols or elements containing proprietary information).

Access to a proprietary element of an incumbent's network is necessary if (1) a functional substitute is unavailable from non-ILEC sources or is available from such sources only at prices or on terms that would preclude meaningful opportunities for competitive entry by a reasonably efficient competitor, and (2) it is effectively impossible to provide telecommunications service without access to that element or a functional substitute from some other source.

The first element of this test mirrors the Aimpairment test: Because Congress created a higher threshold for unbundling proprietary elements, a proprietary element clearly should not be unbundled if it does not even meet the standard for unbundling nonproprietary elements. The second element establishes an additional condition before a proprietary element must be unbundled X that the element or its functional substitute is indispensable to providing service. This prong parallels the antitrust requirement that a facility (whether proprietary or not) should be required to be shared only when it is essential to a firm's ability to provide the product or service in question. This standard ensures that an ILEC will not be able to exclude others from the market for local telephone service even if it uses proprietary elements, while at the same time preserving much of the incentives for ILECs to continue to innovate and invest.

III. THE COMMISSION SHOULD IMPLEMENT ITS UNBUNDLING REQUIREMENTS THROUGH THE USE OF A COMBINATION OF NATIONAL RULES AND PRESUMPTIONS THAT COULD BE APPLIED BY STATE COMMISSIONS IN SECTION 252 PROCEEDINGS.

As the Commission applies section 251(d)(2) to various proposed network elements, it is not required to adopt one list of elements that must be unbundled in every market throughout the nation. Although the Commission took that approach in the *Local Competition Order*, it never was obligated to do so, and the wealth of market data and experience that is now available makes it possible to create much more precise and tailored unbundling requirements in

response to the Supreme Court=s mandate. Indeed, to ignore this data and to impose unbundling obligations in areas or markets where they are not needed would ignore Congress= command in section 251(d)(2) to unbundle elements only insofar as they are needed to provide an efficient competitor meaningful opportunity for competitive entry. Thus, to the extent it is administratively practicable, the Commission should consider non-uniform, tailored rules as it develops its unbundling regime.^{1/} U S WEST proposes that the Commission use a set of national presumptions that states could readily apply in section 252 proceedings to determine which elements must be unbundled in which kinds of markets.^{1/} Such presumptions could be made simple to apply and understand by basing them on objective market data and would provide a basis on which CLECs and ILECs could rely in planning their business strategies.

^{53/} AT&T has argued that the Act=s assignment of the task of issuing unbundling rules to the Commission, rather than to the states, reflects an intention to develop nationwide standards. *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, Ex parte of AT&T, at 4 (filed Feb. 11, 1999). This is a non sequitur. There is no reason to assume that Congress intended to force the Commission to adopt what Commissioner Powell has characterized as a Aone-size-fits-all= regime. *Second FNPRM*, Statement of Commissioner Powell.

^{54/} The tailored approach advocated here is also consistent with the market definition standards employed in the *Merger Guidelines* relied upon by the FTC and the Justice Department. *See Hausman & Sidak Affidavit* & 106.

Of course, uniform nationwide unbundling requirements may well be appropriate for some network elements. The availability of some elements, for example, may not vary by geography or market, and a uniform nationwide rule could be the most efficient and administrable means of implementing section 251(d)(2) with respect to those elements. DSLAMs, for example, can be purchased and provisioned on terms that do not vary based on the market for which they are obtained. Furthermore, DSLAMs are scalable: They can be purchased and used in small increments without significant economies of scale. Thus, if the Commission finds that DSLAMs are competitively available and do not need to be unbundled *somewhere*, it also should find that they need not be unbundled *anywhere*. Conversely, some elements may *not* be available for competitive entry anywhere in the nation, and a nationwide rule requiring unbundling everywhere would be appropriate.

It is quite likely, however, that the availability of many elements varies by geographic market. As discussed in more detail in Part V, for example, switching passes the impair test, at least for now, in some areas of the country. In other areas, however, non-ILEC sources of switching unquestionably are available and have been used, and the impair test clearly is not met. It would not be appropriate, therefore, for the Commission to impose a nationwide unbundling requirement for switching because, as discussed in Parts I and II above, section 251(d)(2) requires the Commission to limit its unbundling requirements and to preserve market incentives to the greatest extent possible consistent with the necessary and impair standards. Thus, for elements whose availability varies by geography or other criteria, the Commission should carefully consider whether it should adopt unbundling rules that would apply on a market-by-market or region-by-region basis.

Of course, any unbundling regime that required a detailed market analysis for each wire center or metropolitan statistical area (AMSA \equiv) in the country would not be administrable. And it could delay entry for an extended period of time. Such individualized market studies, however, are not necessary. The Commission could easily administer tailored unbundling requirements by employing two useful tools.

First, where national rules are inappropriate because the availability of an element varies by market, the Commission should rely on a set of unbundling presumptions based on objective geographic or demographic measures that serve as reasonably accurate predictors of where elements are competitively available for entry. For example, if the record reveals that MSAs above a certain population or customer-density level generally have competitive access providers who deploy their own fiber rings, the Commission could adopt a presumption that alternative sources of interoffice transport are available and that unbundling of that element is not required in any MSA with a population or line density above that level X and, conversely, that unbundling is presumptively required in MSAs that do not meet those criteria.

Using such presumptions, the Commission could fashion a precise unbundling regime without the administrative costs and delays arising from individualized, market-by-market analyses. Furthermore, such presumptions would build into the Commission's unbundling regime a self-executing, dynamic flexibility because unbundling obligations could change without Commission intervention as competition evolves throughout the nation. If, for example, the Commission adopts a presumption that an ILEC switch need not be unbundled if one or more CLEC switches are within 50 miles of the ILEC switch, then as more CLEC switches are

deployed, fewer ILEC switches may have to be unbundled.^{1/} In Part V of these comments, U S WEST proposes a number of such presumptions for specific elements. The *UNE Fact Report* prepared by USTA contains a large amount of market data that the Commission could use to develop other appropriate presumptions.

Second, the Commission should allow these unbundling presumptions to be implemented through the section 252 negotiation and arbitration process. Although any such presumptions should, for the sake of simplicity, be rather mechanical to apply, the Commission is not well-positioned to compile and monitor market data on a nationwide basis. In contrast, as Commissioner Powell has observed, state commissions have a closer proximity and more intimate knowledge of these facts.^{1/} They would thus be ideally positioned to track such localized data on a current basis and to determine where the Commission's unbundling presumptions would or would not apply. An ILEC, CLEC, and state commission together should be able to determine, for example, the location of CLEC switches deployed in a rate center or the number of access lines in a wire center, if the Commission were to adopt presumptions based on such criteria.

^{55/} This is not to say, of course, that the moment the factual predicates of a presumption are met, the ILEC can cut off an unbundled network element being used by a CLEC. Rather, as discussed in Part VI below, the Commission can adopt reasonable transitional mechanisms for such circumstances.

^{56/} *Second FNPRM*, Statement of Commissioner Powell at 5.

Furthermore, state-level determinations would bring needed flexibility to the Commission's unbundling regime because both new entrants and incumbents would be allowed to rebut a Commission presumption with evidence that the presumption is not accurate for an individual market or area.^{57/} Of course, it should not be easy for a carrier to overcome a Commission presumption, because both ILECs and CLECs need some measure of certainty about unbundling obligations in order to engage in meaningful business planning. Parties therefore should be allowed to rebut a Commission presumption only on the strongest of evidence that particular characteristics in a market render it significantly different from others in which the presumption applies. Evidence that *a particular carrier* needs an element would not be sufficient; as with the necessary and impair tests generally, the key issue would be whether the market differs in some way such that the presumption would not apply in the case of an *efficient* competitor.

^{57/} The Commission clearly has authority to adopt presumptions that would be applied by the states. As the Supreme Court made clear in *Iowa Utilities Board*, the Act gives the Commission broad rulemaking authority to carry out section 251, and the states are obliged to follow those rules when establishing specific interconnection and unbundling obligations pursuant to section 252. *See* 119 S. Ct. at 730. The use of unbundling presumptions as described above would be a straightforward application of this scheme: The Commission would prescribe rules that embody rebuttable presumptions, and the states would apply those rules to the facts in specific situations.

This standard should resemble that required to establish a waiver of Commission rules: The party seeking to overcome the presumption would be required to demonstrate in the state proceedings that special circumstances warrant deviation from the presumption and that deviation would serve the public interest.^{58/} With these proposed features, the Commission's unbundling regime would be both administrable and narrowly tailored, as required by section 251(d)(2).

^{58/} *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990). As Judge Leventhal recognized in the leading case, a proponent of such a waiver faces a high hurdle even at the starting gate.≡ *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969).

Although the states would have some flexibility in applying the Commission's presumptions based on unique local situations, the Commission should be careful not to give the states further flexibility to impose additional unbundling obligations not contemplated by the Commission's rules. As discussed above in Part I, section 251(d)(2) plays an integral part in Congress' plan to promote facilities-based competition by limiting what elements must be unbundled. If states are permitted to superimpose their own unbundling policies on top of the Commission's requirements, the purposes of section 251(d)(2) could be undermined. The Commission therefore should determine for each element that it considers in this proceeding whether the element must be unbundled everywhere, may not be unbundled anywhere, or may be unbundled only pursuant to a presumption established by the Commission. For any element *not* addressed in this proceeding, the Commission should prohibit the states from imposing any unbundling requirements. States or CLECs could, of course, petition the Commission to amend its rules to adopt new unbundling requirements based either on a change of circumstances or the failure of the Commission to consider an element in this proceeding.^{59/} The states, however, should not be allowed to impose additional unbundling requirements before the Commission has been given a chance to consider whether such unbundling is compatible with section 251(d)(2) and the pro-competitive goals of the 1996 Act.

IV. THE PROPONENTS OF MANDATORY UNBUNDLING SHOULD BEAR THE BURDEN OF PROOF IN THESE PROCEEDINGS.

^{59/} As noted in Part VI below, ILECs should similarly be permitted to petition to eliminate unbundling requirements or presumptions based upon market developments.

In evaluating whether to require LECs to unbundle various elements, the Commission should assign the burden of proof to those parties advocating that an element be unbundled. As section 251(d)(2) recognizes, forced sharing of facilities with competitors is a substantial deviation from the normal operation of a competitive marketplace and should occur only when required to ensure the development of competition. Indeed, under the essential facilities doctrine, proponents of sharing bear a heavy burden of showing why such an extraordinary remedy is necessary.^{60/} The Commission therefore should not require an element to be unbundled unless CLECs have clearly demonstrated that the necessary and impair standard has been satisfied (*i.e.*, that an element is available from non-ILEC sources *only* at prices or on terms that would preclude meaningful opportunities for competitive entry by an efficient competitor). Although theory and speculation may have been the only basis to justify unbundling in 1996, they cannot suffice now in light of the extensive specific empirical evidence that is available.

^{60/} See *David L. Aldridge Co.*, 995 F. Supp. at 752-53 (describing burden on plaintiff seeking access to essential facilities); IIIA Areeda & Hovenkamp, *supra*, & 773b; *cf.* 5 U.S.C. § 556(d) (A[T]he proponent of a rule or order has the burden of proof.≡).

Assigning the burden of proof to CLECs is particularly appropriate because CLECs have unique access to most of the statistical and market evidence that the Commission should consider under section 251(d)(2). As the Commission and the courts have traditionally recognized, parties with unique access to relevant data ordinarily bear the burden of producing that evidence,^{61/} and their failure to produce it raises the presumption that it is harmful to them.^{62/} In this proceeding, only CLECs have complete information about what facilities they have been able to deploy and the costs and other terms on which they can obtain elements from non-ILEC sources. Indeed, as the *de Fontenay Report* demonstrates, new entrants typically will spend substantial resources investigating multiple network designs and determining how facilities can be provisioned from alternative sources. With their networks substantially complete, however, ILECs generally do not conduct such investigations or collect such data. Thus, if CLECs fail to come forward with the substantial and detailed evidence they possess regarding an element=s

^{61/} See, e.g., *Implementation of the Non-Accounting Safeguards of Sections 271 and 272*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 21905, 22072 & 345 (1996) (placing burden of production on the party most likely to have relevant information in its possession); *Application of Illinois Bell Telephone Co.*, CC Docket No. 78-314, Memorandum Opinion and Order, 69 F.C.C.2d 1199, 1213 & 32 (1978) (placing burden of production and burden of proof on party that had sole possession of key information).

^{62/} See 2 Wigmore, *Evidence* § 285 (Chadbourn rev. 1979) (The failure to bring before the tribunal some circumstance, document, or witness, when either the party himself or his opponent claims that the facts would thereby be elucidated, serves to indicate, as the most natural inference, that the party fears to do so; and this fear is some evidence that the circumstance or document or witness, if brought, would have exposed facts unfavorable to the party.); see also *Vodusek v. Bayliner Marine Corp.*, 71 F.3d 148, 156-57 (4th Cir. 1995); *Evans v. Robbins*, 897 F.2d 966, 970 (8th Cir. 1990); *Callahan v. Schultz*, 783 F.2d 1543, 1545 (11th Cir. 1986); *International Union (UAW) v. NLRB*, 459 F.2d 1329, 1336-42 (D.C. Cir. 1972).

unavailability, the Commission can and should reasonably conclude that the element is available from non-ILEC sources and need not be unbundled.^{63/}

V. APPLYING THE TEST TO SPECIFIC ELEMENTS

If one applies the basic legal and economic principles outlined above to the market evidence from the past three years, it becomes clear that the Commission's new unbundling rules should be far more limited in scope than those the Commission adopted in 1996. The *UNE Fact Report* submitted by USTA shows in great detail that, as the CRTC and other international regulatory authorities have concluded, competitive entry into local exchange markets is generally not being impaired by the absence of mandatory access to ILEC network elements and CLECs have been consistently able and willing to provision their own network elements.

^{63/} Of course, ILECs must be given access to X and the opportunity to rebut X any data that CLECs provide to the Commission. If some of the data is confidential, CLECs should proffer it in a manner that reduces its commercial sensitivity, or the Commission should make it available to interested parties pursuant to a protective order. *See generally Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission*, GC Docket No. 96-55, 13 FCC Rcd 24816, 24843-45 && 43-46 (1998); *see also Westinghouse Electric Corp. v. United States Nuclear Regulatory Commission*, 555 F.2d 82, 95 (3d Cir. 1977) (stating that party cannot submit confidential information in a rulemaking under conditions which will in effect deprive other interested parties of the opportunity to challenge it before the agency or upon judicial review).

Before analyzing each network element in detail, however, it is useful to look more broadly at the market dynamics of competitive entry that have led to these developments. As explained in the attached report prepared by the consulting firm of de Fontenay, Savin & Kiss, the market imperatives of cost control and higher quality are driving CLECs to build their own network facilities and thereby gain an advantage over ILECs. Indeed, CLECs often are avoiding use of ILEC circuit-switched networks because CLECs have determined that packet-switched networks will form an important framework for the provision of both data and voice services.

In August 1998 X prior to and entirely independent of this Commission proceeding X de Fontenay, Savin & Kiss was retained by a large foreign telecommunications company to assess the opportunities for building the U.S. component of a global data services network. These consultants conducted extensive nationwide research regarding, *inter alia*, whether the consultants= foreign client could obtain access from CLEC, rather than ILEC, facilities in order to complete its service offerings. Moreover, this study *excluded* reliance upon any such facilities available from AT&T, MCI Worldcom, or Sprint.

After discussions with a variety of CLECs, the consultants advised their foreign client that it was both economically feasible and advisable to meet the client=s North American objectives by utilizing *exclusively* the facilities of these new local carriers, with the exception of local loops. Indeed, ILEC facilities other than the local loop were of little relevance to the market entry of either existing CLECs or the consultants= foreign client. ILEC interoffice transport and switching, for example, generally were not needed for the competitive provision of telecommunications services. The *de Fontenay Report* explains at length that CLECs are

choosing to invest in their own, higher quality facilities in hopes of gaining a strategic and competitive *advantage* over ILECs, especially as telecommunications markets shift from circuit-switched voice to packet-switched data services. These findings are fully consistent with many of the SEC filings of the CLECs themselves. As Electric Lightwave has boasted, for example, it is not reliant on unbundled elements in its provision of services.^{64/}

^{64/} *de Fontenay Report* at 12-13 n.7.

Thus, the empirical evidence shows that competitive entry is not being impaired by a lack of access to ILEC facilities. Indeed, the \$11 billion that CLECs have invested in local exchange facilities since 1996 is a sign that market forces are starting to work,^{65/} by spurring competition and the development of new telecommunications infrastructure. As explained in Parts I and II above, however, the Commission should be careful not to disrupt or hamper this investment by imposing unbundling regulations that would discourage investment by both ILECs and CLECs.

Turning now to specific network elements, we analyze in turn each of the elements that the *Local Competition Order* required to be unbundled, followed by an analysis of unbundling requirements for advanced services facilities.

**A. Loops X The Commission Should Require Loop Unbundling
Nationwide Except for High-Capacity Facilities.**

^{65/} See *ALTS Convention Notebook*, Communications Daily, May 4, 1999 (citing ALTS President John Windhausen for the \$11 billion figure).

Although ILEC loops have long been considered a natural monopoly to which any competitor would need access in order to provide local service, technological improvements are rapidly and undeniably undermining the universal application of that premise. Perhaps the strongest evidence is the thousands of miles of fiber that CLECs have laid directly to large and medium-sized business customers in urban areas. In the top 50 MSAs alone, CLECs have deployed nearly 30,000 miles of fiber, and CLECs have deployed fiber in all but 15 of the MSAs ranked between 51 and 150.^{66/} CLEC fiber reaches approximately 15 percent of all commercial office buildings in the country.^{67/} Indeed, CLECs now serve between 9 and 18 percent of all business lines in Adense≡ wire centers (*i.e.*, wire centers serving 40,000 or more loops) in which they are collocated.^{68/} This bypassing of ILEC loops is shown clearly by comparing the number of lines that CLECs serve with the number of loops CLECs have purchased from ILECs. By the end of April 1999, for example, CLECs had Aported≡ 292,578 telephone numbers from U S WEST switches, in addition to the thousands of other telephone numbers that CLECs have had assigned directly to them. As of May 8, 1999, however, CLECs had purchased only 14,857 unbundled loops from U S WEST. Thus, CLECs plainly have been able (and quite willing) to provide local exchange service without using ILEC loops.

^{66/} *UNE Fact Report* at III-3.

^{67/} *Id.*

^{68/} *Id.* at III-16.

The premise that loops are a natural monopoly also is being undermined in residential markets. Most prominently, AT&T's recent merger with TCI and its proposed buyout of MediaOne show that smart money is betting that cable telephony will be a viable way to reach customers in their homes. In these deals, AT&T has decided to invest \$90 billion and has promised the Commission that it will rapidly upgrade its newly-acquired cable plant to provide telephony. And, in the largest global bond offering in history, AT&T recently was able to raise \$8 billion from the capital markets in order to help finance that deployment.^{69/} Market analysts estimate that the MediaOne merger, if approved, would give AT&T the ability to provide local exchange service to *60 percent* of American households.^{70/} (By contrast, U S WEST currently reaches, at most, 10 percent of the nation's households.) Other major cable MSOs such as Time Warner and Comcast also are pursuing similar telephony strategies. Furthermore, fixed and mobile wireless systems are starting to be realistic alternatives to the local loop. Companies like WinStar, Nextlink and AT&T, for example, are investing heavily in relatively cheap, scalable, and

^{69/} *AT&T Closes \$8 Billion Global Bond Offering Sets Record*, Business Wire 10:23:00, Mar. 26, 1999.

^{70/} Doug Halonen & David Hatch, *Hearings on for AT&T*, Electronic Media, May 10, 1999, at 33.

easy-to-maintain fixed wireless technology.^{71/} And as mobile wireless prices continue to fall, mobile phones are already becoming a substitute for ILEC service for many customers.^{72/}

^{71/} See *UNE Fact Report* at III-10 to III-13.

^{72/} *Id.* at III-22 to III-25.

Despite this evidence that alternatives to ILEC loops are becoming competitively available, U S WEST recognizes that loops X at this time X meet section 251(d)(2)s necessary and impair tests in most areas of the nation and that mandatory unbundling of loops therefore generally would be justified on a nationwide basis.^{73/} The one exception to this rule should be ILEC high-capacity facilities running directly to customer premises. CLECs do *not* need unbundled access to these facilities. As noted above, CLECs have achieved remarkable market penetration in serving business and other high-volume customers by deploying their own fiber. In addition, CLECs already can and do serve such customers by obtaining ILEC private lines and special access interconnection pursuant to federal and state tariff. Indeed, competitive providers have used both their own fiber and resold services from U S WEST to capture a large share of the retail market for high-capacity services,^{74/} and many states have found these services to be so competitive that they have deregulated them. Furthermore, the mandatory unbundling of the high-capacity facilities that underlie private line and special access interconnection would effectively give CLECs those entire services at prices lower than the regulated tariff rates. Such Aunbundling≡ would promote regulatory arbitrage and serve no valid statutory or public purpose.

^{73/} We discuss below in Part V.B.7 whether unbundling should be required for the advanced electronics that increase the speed by which data can be transmitted over copper loops (e.g., DSLAMs). We do not address in these comments, however, the issues of subloop unbundling and frequency unbundling. Those complex issues are being addressed in the Commission=s Advanced Services proceeding. *See Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 24011, 24083-84, 24089-91 && 162, 173-76 (1998).

^{74/} *See generally* *Petition of U S WEST Communications, Inc. for Forbearance from Regulation as a Dominant Carrier in the Seattle, Washington MSA*, CC Docket No. 99-1, *Petition of U S WEST Communications, Inc. for Forbearance* (filed Dec. 30, 1998).

U S WEST therefore proposes that the Commission adopt a presumption that unbundling is not required for ILEC high-capacity facilities. More specifically, an ILEC presumptively should not have to unbundle transmission facilities that connect to end user premises and that operate at DS1 or higher transmission levels. This presumption would be only a narrow exception to the general loop unbundling requirement, and as noted above, CLECs could rebut the presumption with evidence that unique local conditions prevent deployment of high-capacity facilities to certain customers.

For the same reasons, it follows that the Commission should not broaden its definition of the loop element to include dark fiber. Dark fiber running to a customer=s premises is nothing more than inactivated capacity on the high-capacity fiber loops discussed above, and CLECs can deploy dark fiber just as well as they can deploy lit fiber to high-volume customers.^{1/} CLECs therefore do not need access to dark fiber running to a customer=s premises, and dark fiber does not satisfy meet the impair test.

Finally, the Commission should recognize that its loop unbundling rules should be modified as competitive alternatives to ILEC loops become available. If loop competition is not yet universally available, it also is not far away. The Commission therefore should consider automatic sunseting mechanisms for loop unbundling, such as the five-year sunset that the CRTC imposed on its unbundling requirement for urban local loops in Canada in May 1997.^{1/} The Commission also should be prepared to consider and act on future ILEC requests to modify the

^{75/} See generally *UNE Fact Report* at II-26 to II-28.

^{76/} *Canadian Local Competition Decision* && 82-87. The unbundling requirement for urban loops will end on May 1, 2002.

loop unbundling requirements as evidence grows that the need for local loops no longer impairs competitive entry.

B. Network Interface Devices (NIDs) X NIDs Should Be Unbundled as Part of the Loop Where ILECs Are Required To Unbundle Their Loops.

If NIDs are considered on a stand-alone basis, they do not pass the impair test.

Network interface devices (NIDs) are unquestionably available for purchase from numerous competitors, at low prices, and in any volume.^{17/} Indeed, the Commission's current rules allow *end users* to supply their own NIDs for interconnection to the telephone network.^{18/} Thus, ILECs do not have bottleneck control over NIDs, and CLEC can self-provision these devices.

Nonetheless, U S WEST recognizes that it is operationally efficient to have the same carrier provide both the local loop and the NID for a particular customer. Thus, loops should be defined to include the NID, with the result that ILECs would provide NIDs in conjunction with loops where they are required to unbundle their loops.

^{17/} See *UNE Fact Report*, III-29.

^{18/} *Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network and Petition for Modification of Section 68.213 of the Commission's Rules Filed by the Electronic Industries Association*, CC Docket No. 88-57, Report and Order and Further Notice of Proposed Rulemaking, 5 FCC Rcd 4686, 4687 & 5 (1990).

C. Operations Support Systems (OSS) X ILECs Should Be Required To Unbundle Only Certain OSS Functions Used To Provision Service pursuant to Sections 251(c)(3) and 251(c)(4).

U S WEST agrees that ILECs should be required to provide unbundled access to the five OSS functions identified in the *Local Competition Order*: pre-ordering, ordering, provisioning, maintenance and repair, and billing. However, ILECs should have to provide such access only if CLECs need those functions to obtain either (1) network elements that ILECs must unbundle pursuant to section 251(c)(3), or (2) services that ILECs must resell pursuant to section 251(c)(4). For example, although a CLEC may need an ILEC OSS function to provision or make efficient use of an ILEC's loops, the CLEC does not need that OSS function when the CLEC provisions its own loops or uses the loops of another CLEC. In those situations, CLECs can simply supply their own OSS. The available evidence shows that a competitive market has developed for customized OSS products and that CLECs can and do purchase these products from vendors such as Metasolv, Visionael, Remedy, Nortel, and Lucent.^{79/}

D. Switching X The Commission Should Adopt a Presumption That Any ILEC Circuit Switch Within a 50-Mile Radius of One or More CLEC Circuit Switches (Or Packet Switch Providing Voice Services) Should Not Be Unbundled.

The market data for switching reveal a rather amazing fact: CLEC switches now serve more than one-third of BOC and GTE rate centers and can be expanded easily to serve many more.^{80/} The fact that CLECs have been able to enter so many markets using non-ILEC switching X especially when considered in light of the broad geographic reach of these CLEC

^{79/} See *de Fontenay Report* at 42-45.

^{80/} See *UNE Fact Report* at I-7.

switches X shows that access to ILEC circuit switches is not a prerequisite to market entry in many, if not all, parts of the nation.^{4/}

^{81/} U S WEST deals in this section only with the unbundling of ILEC *circuit* switches. As discussed in the context of advanced services below, the Commission should adopt a rule that ILEC *packet* switches do not have to be unbundled, at least unless an ILEC replaces a circuit switch in its network with a packet switch and that packet switch is used to provide voice services.

As the *UNE Fact Report* explains in greater detail, CLECs are now provisioning their own circuit switches on a wider and wider scale. Before the 1996 Act eliminated local franchise monopolies, CLECs had deployed only 65 switches.^{1/} In the last three years, however, they have increased that number over eleven-fold, to 724.^{1/} The scope of CLEC coverage is particularly impressive in urban areas: In 25 of the largest 30 MSAs, CLEC switches serve 70 percent or more of all rate exchange areas.^{1/} In U S WEST=s territory, for example, 100 percent of all the rate exchange areas in Denver are served by at least one CLEC switch; 80 percent are served by *four or more* switches.^{1/} Similarly, in Seattle, all the rate exchange areas are served by at least one CLEC switch and nearly half are served by four or more CLEC switches.^{1/} These figures, which are based on areas where CLECs have obtained NXX codes, do not even take into account rate exchange areas where CLECs can obtain ported ILEC numbers. As the *UNE Fact Report* explains, it is reasonable to infer that CLECs compete in all rate exchange areas served by

^{82/} See *UNE Fact Report* at I-1.

^{83/} See *id.*

^{84/} See *id.* at I-11.

^{85/} See *id.*

^{86/} See *id.*

an LNP-capable ILEC switch and, based on that inference, CLECs compete in *75 percent* of all BOC and GTE rate exchange areas in the 50 largest MSAs.^{87/}

The evidence is overwhelming that CLECs not only can enter a large number of markets by obtaining their own circuit switches but are in fact doing so, even with ILEC switching available at TELRIC prices. Just as significant is what CLECs are *not* choosing to do X relying on unbundled switching to provide service. In fact, in the three years since passage of the Telecommunications Act, *not one CLEC has purchased unbundled switching from U S WEST*. The increasing number of switches being deployed by CLECs X and the absence of any CLEC in U S WEST=s territory using unbundled switching X demonstrate beyond doubt that lack of access to unbundled switching cannot be said to Apreclude meaningful opportunities for competitive entry by an efficient competitor≡ in many, if not all, markets.

^{87/} See *id.* at I-21.

In light of these facts, the Commission should, *at a minimum*, establish a presumption that an ILEC circuit switch is not required to be unbundled if one or more CLEC circuit switches (or packet switches used in the provision of voice services) are within 50 miles of the ILEC switch. Any CLEC switch within 50 miles of an ILEC switch unquestionably can serve all the customers served by the ILEC switch by, for example, collocating a digital loop carrier (DLC) at the ILEC switch and using even low-powered regenerators. The CLEC Allegiance, for example, has adopted a so-called Asmart-build strategy under which it Ainstalls its own switch in each market,≡ leases ILEC loops, and Ainstall[s], or physically locat[es] transmission equipment in [ILEC] central offices to route customer traffic through them to Allegiance=s own switch.≡^{1/}

^{88/}

Allegiance Telecom, Inc., Form S-1, at 19 (filed Mar. 19, 1999).

Indeed, the 50 mile limit is highly conservative: While a DLC can be placed at least 50 miles from the CLEC switch with the lowest power regenerators, that limit can increase to as much as 160 miles with higher powered regenerators. Moreover, the geographic range of CLEC switches far exceeds the range of ILEC counterparts. As AT&T has noted, CLEC switches using DLCs can reach customers up to 125 miles away, while remote switching modules and other technologies extend the reach of modern switches to as much as 600 miles.^{1/} The significance of the deployment of at least one CLEC switch within 50 miles of an ILEC switch is far more than the fact that the CLEC switch can serve the ILEC=s customers. First, the deployment by one CLEC provides strong evidence that other CLECs could self-provision switching in the same area. Indeed, there is no reason to believe that another CLEC of comparable efficiency could not do so. And as long as self-provisioning is an economically viable alternative, the absence of compelled unbundling of the switch clearly does not preclude meaningful opportunities for competitive entry in that area. Second, the presence of one or more CLEC switches that can serve all the customers served by the ILEC switch provides new CLECs the opportunity to lease switching capacity on those CLEC switches (as well as from the ILEC on a voluntary basis). Accordingly, the absence of mandatory unbundling by the ILEC will have little, if any, effect. To be sure, a CLEC with its own switch may not be willing to unbundle if it is using most or all of its switching capacity for its own customers. But if all the switches in an area are operating at or near capacity, the demand for switching capacity is almost certainly high enough to make it economically feasible for an efficient entrant to provision its own switch.

^{89/} See *UNE Fact Report* at I-23 to I-24.

Adopting this presumption is an extremely conservative approach given the factual evidence of the last three years. The reality is that, because of the geographic range of modern switches, even CLEC switches much farther than 50 miles from an ILEC switch provide actual competition to the ILEC switch. In addition, the presumption focuses only on CLEC circuit switches and packet switches actually being used to provide voice service. The fact of the matter, however, is that many, if not most, of the new switches being deployed are packet-switched. The most dramatic proof of this fact is the recent announcement by AT&T that it would stop procuring voice switches entirely by the end of this year.^{1/} These packet switches, even if not currently being used to provide voice services, clearly could in many cases be used to provide the same services as ILEC circuit switches. Accordingly, the increasing presence of such packet switches provides further evidence that compelled access to an ILEC circuit switch does not meet the impair test.

Moreover, the presumption suggested here does not even begin to take account of the potential competition in the areas where no CLEC switch is within 50 miles of an ILEC switch. Self-provisioning is an economically viable option for virtually any reasonably efficient competitor in almost any region. Switches are provided by a number of major manufacturers,^{1/} and prices have fallen dramatically on a per-line basis since 1986.^{1/} Although switching exhibits

^{90/} Seth Schiesel, *AT&T=s Embrace of the New Technology Signals Next Era*, N.Y. Times, Mar. 8, 1999, at B1

^{91/} See *UNE Fact Report* at I-28.

^{92/} See *id.*

some economies of scale, manufacturers are increasingly producing numerous switches designed for smaller and medium-sized carriers.^{1/}

Ultimately, there is very little, if any, reason to believe that lack of access to switching as a UNE under section 251(c)(3) in any way precludes meaningful opportunities for entry by an efficient competitor in any market. But what is absolutely clear is that the absence of mandatory access to an ILEC switch that is within 50 miles of at least one CLEC circuit switch (or packet switch providing voice services) does not preclude or even hamper the ability of a competitor to provide service. Accordingly, the Commission should at least adopt a presumption that switching does not have to be unbundled in those cases.

**E. Signaling Networks and Call-Related Databases X The Commission
Should Require ILECs To Unbundle Signaling Only for Those CLECs
That Obtain Switching from ILECs.**

^{93/}

See id. at I-28 to I-29.

Each ILEC switch is associated with only one signaling network.^{1/} Thus, if a CLEC uses an ILEC switch, the CLEC must use the ILEC=s signaling network as well. For this reason, U S WEST recognizes that, to the extent the Commission requires ILECs to unbundle their switches, the ILECs also must unbundle their signaling and call-related databases.

^{94/} *See id.* at V-1.

If, however, a CLEC uses its own switching, there is no reason to force an ILEC to provide unbundled access to its signaling network. The equipment that a CLEC needs to establish its own signaling network is available on a competitive basis from multiple vendors,^{1/} and according to the Local Exchange Routing Guide, at least six CLECs have actually deployed signal transfer points (ASTPs[≡]) to provide their own signaling.^{1/} Furthermore, a carrier=s signaling network can achieve a *nationwide* footprint by deploying STPs in only a handful of locations.^{1/} Moreover, CLECs also have the option of obtaining signaling services from wholesale providers.^{1/} As the Commission itself has recognized, CLECs have access to multiple wholesale sources for signaling.^{1/} Based on this evidence that CLECs can and do provide their own signaling and that signaling also is competitively available on a wholesale basis, there is no reason for the Commission to require ILECs to provide signaling to CLECs that use their own switches.

^{25/} See *id.* at V-5.

^{26/} See *id.* at V-2 to V-3.

^{27/} See *id.* at V-1.

^{28/} See *id.* at V-2.

^{29/} *Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom Inc.*, CC Docket No. 97-211, Memorandum Opinion and Order, 13 FCC Rcd 18025, 18061 & 60 (1998) (AWe disagree with GTE=s claim that the new firms [e.g., Qwest, IXC Williams, Level 3] will be unable to deploy signaling equipment for years. Applicants identify several companies, including Transaction Network Services, Inc., GTE Intelligent Network Services, and SNET, that provide wholesale SS7 signaling services.≡); see also *de Fontenay Report* at 42 n. 45 (ICG).

F. Interoffice Transmission Facilities X The Commission Should Adopt a Presumption That ILECs Do Not Have To Unbundle Interoffice Transmission Facilities to or from Wire Centers That Both (a) Serve 20,000 or More Loops, and (b) Have One or More Collocated CLECs.

Like switching, interoffice transmission facilities are widely available on a competitive basis and should be subject to only limited, if any, unbundling requirements.^{100/} The so-called fiber optic revolution¹⁰¹ has led to an explosion of new fiber installation throughout the nation by non-ILECs, and other companies have developed substantial transmission networks using fixed wireless links. The availability of these new means of interoffice transmission demonstrate that CLECs do not need ILEC interoffice facilities in order to provide local exchange service. Indeed, CLECs generally are competing without using unbundled ILEC interoffice transport except in very limited instances.

^{100/} U S WEST refers here only to transport facilities as unbundled network elements, not to *interconnection* facilities used to provide interconnection pursuant to section 251(c)(2).

Since at least the early 1980s, interoffice transmission facilities have not been a natural monopoly, and the market for such transport has been open to competition. During the Bell divestiture proceedings, for example, MCI insisted that competition was possible in facilities all the way down to the smallest Class 5 switch X meaning that the short-distance market served by the Commission's interoffice transmission UNE apparently was subject to facilities-based competition even back in 1984.^{101/} This market has rapidly become even more competitive since divestiture, particularly since the 1996 Act. Sixty CLECs have constructed fiber networks since 1996,^{102/} and total CLEC fiber deployment already includes over 50,000 route miles serving over 250 cities.^{103/} Indeed, CLECs have already deployed nearly 30,000 miles of fiber in the top 50 MSAs alone.^{104/} Forty seven of those 50 MSAs are served by at least three CLEC fiber networks, and at least one CLEC has deployed fiber in 85 of the 100 MSAs ranked between 51 and 150 in population.^{105/} Furthermore, prices have fallen substantially as bandwidth has become a commodity that can be purchased from a variety of sources. Many CLECs, for example, now purchase capacity on other CLEC fiber networks,^{106/} and, according to one recent report, At the wholesale

^{101/} See *UNE Fact Report* at II-2, II-21. The Department of Justice ultimately decided, for other reasons, to keep this short-distance transport within the BOCs' X rather than the IXCs' X line of business.

^{102/} See *id.* at II-6.

^{103/} See *id.* at II-5, II-6.

^{104/} See *id.* at II-6.

^{105/} *Id.*

^{106/} See *id.* at II-5.

spot price of bandwidth is down 35% [since June 1998], thanks to ample supply.^{107/} In addition, the deployment of fixed wireless transmission links by CLECs large and small X from WinStar and Teligent to AT&T and Sprint X has added even more competitive pressure in the market for interoffice transport.^{108/}

With this ample evidence of CLEC deployment, it should be clear that the unbundling of ILEC interoffice transmission facilities is not required on a nationwide basis. CLECs seem to have little trouble entering the market using their own fiber networks, and the ample supply of capacity is making it possible for new CLECs to purchase capacity from existing CLECs at competitive prices. The Commission therefore should, at a minimum, not require ILECs to unbundle their interoffice transmission facilities in areas where competitive alternatives are available for interoffice transport.

^{107/} Toni Mack, *Fiber Frenzy: Betting on Bandwidth*, Forbes, Apr. 19, 1999, at 252.

^{108/} See *UNE Fact Report* at II-16 to II-17.

To determine precisely *where* unbundling should and should not be required, the Commission unfortunately cannot rely on comprehensive, nationwide records of CLEC fiber deployment because no such records exist. The Commission, however, does have access to market data that would allow it to develop quite reliable *proxies* about where such fiber is available. Three major ILECs X Bell Atlantic, SBC, and U S WEST X compile quite detailed information about CLECs fiber deployment in their regions. *According to this data, CLEC fiber is very likely to be found in Adense≡ wire centers where at least one CLEC has obtained collocation.* Indeed, the data compiled by U S WEST show that competitive fiber is available in *at least* 74 percent of its wire centers that have (1) more than 20,000 loops, and (2) at least one collocated CLEC.^{109/} In Bell Atlantic=s and SBC=s regions, the comparable figures are 72 percent and 90 percent, respectively.^{110/} The correlation becomes slightly better by analyzing wire centers with even more loops. Considering only those wire centers with more than 40,000 loops and at least one collocated CLEC, competitive fiber is deployed in *at least* 77 percent of these wire centers in U S WEST=s region, 80 percent in Bell Atlantic=s region, and 92 percent in SBC=s region.^{111/}

Because competitive fiber is so likely to be found in dense wire centers with collocation, the Commission should establish a presumption that unbundling is not required for interoffice facilities running to or from such wire centers. At a minimum, the Commission should

^{109/} See *UNE Fact Report* at II-8.

^{110/} See *id.*

^{111/} See *id.*

adopt a presumption that unbundling is not mandatory in wire centers that have more than 40,000 loops and at least one collocated CLEC. As explained above, however, CLEC fiber is almost as likely to be found in wire centers with 20,000 loops as it is in wire centers with 40,000 loops. Thus, the Commission should go further and adopt a presumption unbundling is not required in wire centers with more than 20,000 loops and at least one collated CLEC. Even this presumption would provide quite limited relief to ILECs: In U S WEST=s region, for example, this presumption would eliminate unbundling requirements in only 16 percent of wire centers,^{1/} and the unbundling relief would occur primarily in large metropolitan areas in the region, such as Denver, Seattle, and Phoenix.

^{112/}

See id.

The Commission should adopt such a presumption even though the proxies suggest that there are some dense wire centers with collocation that do *not* have CLEC fiber. First, the proxies are too conservative and *underestimate* the true availability of competitive transport. For example, the ILECs' fiber maps do not show all CLEC and third-party fiber, and the proxies also do not reflect the availability of any *non-fiber* interoffice transport, such as wireless links.^{1/} Second, the fact that competitive fiber is so widely available in dense wire centers with collocation strongly indicates that it is economically feasible for CLECs to deploy such fiber in all such markets. Accordingly, the absence of compelled unbundling of transport does not preclude meaningful opportunities for an efficient competitor to enter such markets. Third, even if for some reason it were not economically feasible in some dense wire centers with collocation to deploy fiber or obtain it from non-ILEC sources, CLECs could rebut the presumption for those wire centers. If, for example, a wire center in Des Moines fit within the presumption but lacked competitive transport alternatives and it was not feasible for an efficient competitor to deploy transport facilities, a CLEC could present such evidence to the Iowa state PUC in order to request access to the ILECs' interoffice facilities.

More broadly, the Commission should consider adopting a uniform rule eliminating mandatory unbundling requirements *nationwide*, even where there is not yet direct evidence of competitive transport. As explained in Part II above, evidence of competitive entry is a sufficient X but not a necessary X condition for the elimination of unbundling requirements. Indeed, the economics of competitive fiber suggests that non-ILEC transport is a competitive alternative in all

^{113/} See *id.* at II-16.

areas where a CLEC would want to compete (*i.e.*, all areas where regulatory subsidies have not made competition uneconomical). For example, interoffice transmission facilities are scalable, and CLECs can easily sell their excess capacity to other carriers. Also, the materials and technical know-how required to construct a fiber or wireless network are available to CLECs and other parties on a competitive basis. Moreover, CLECs have the option, entirely independent of the Act's unbundling requirements, of addressing their transmission needs by buying private lines from ILECs pursuant to applicable tariffs. Indeed, many states have declared private line services to be competitive. In sum, unless and until CLECs identify how ILEC market power or some other market failure is preventing them from self-provisioning or otherwise obtaining interoffice transport on economically viable terms, the Commission should not impose any unbundling requirements on ILEC interoffice facilities.

Shared Transport. To the extent that the Commission does in some instances require an ILEC to provide unbundled access to interoffice facilities, the requirement should be no broader than necessary to create a meaningful opportunity for efficient CLECs to compete. In particular, access to what the Commission called Ashared transport^{114/} in the Third Order on Reconsideration in this docket does not meet the impairment test.^{115/} In the case where a CLEC obtains switching from a source other than the ILEC, obtaining shared transport will be impossible since the provision of shared transport requires both ILEC switching and transport.^{116/}

^{114/} See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Order on Reconsideration and Further Notice of Proposed Rulemaking, 12 FCC Rcd 12460 (1997) (AShared Transport Order^{115/}).

^{115/} *Id.* at 12482 & 36.

This result is fully consistent with the Commission's prior ruling that incumbent LECs must offer only *dedicated transport*, and not shared transport, between their switches, or serving wire centers, and requesting carriers' switches.^{116/}

Even in the case where CLECs obtain switching from the ILEC, there would be no basis for giving CLECs a broad right of access to an ILEC's entire interoffice transport network as an undifferentiated whole. Rather, any mandatory right of access should be limited to the specific, individual transmission links that the requesting CLEC identifies with particularity; such access would be more than sufficient to allow an efficient CLEC to obtain the transport functions that it needs to offer local service. Any attempt to compel access to shared transport on the ground that shared transport is more convenient or less costly for a CLEC because it is a combination of facilities is unjustified. Of course, an ILEC and CLEC would be free to negotiate an arrangement for blanket access to the ILEC's entire interoffice network (*i.e.*, shared transport), but the Commission should not require such an arrangement or set its terms.

Dark Fiber. Nor should the Commission unnecessarily broaden any interoffice transport unbundling obligation it might adopt by expanding the definition of transport to include dark fiber. Whatever justification there may be for allowing CLECs to take advantage of an ILEC's preexisting transport network by purchasing unbundled access to the ILEC's *existing, operational* transport facilities, that justification simply cannot extend to dark fiber X unused, inactivated transmission facilities held in reserve for future use. Simply put, there is no

^{116/}

Id. at 12461-62 & 2.

conceivable basis for concluding that ILECs have some advantage vis-à-vis CLECs with respect to dark fiber. As discussed above, fiber has become a commodity that can and is being deployed by numerous CLECs and for which there is a vigorous wholesale market. Of course, CLECs have the ability to lay their own fiber and have the right to obtain access to all necessary rights of way from the incumbent. Accordingly, lack of access to an *ILEC*'s dark fiber would be no barrier to the ability of an efficient CLEC to participate in market for local telecommunications services, and the Commission should not require unbundling of dark fiber.

G. Operator and Directory Assistance Services X The Commission Should Not Require Unbundling of Operator and Directory Assistance Services.

The Commission should not impose any unbundling requirements for operator and directory assistance services. First, ILECs have no market power or advantage over CLECs in the provision of these services. A CLEC needs essentially two inputs in order to self-provision operator and directory assistance services X databases and computers. Both of these inputs are competitively available to CLECs. Section 251(b) of the Act and Rule 51.217 of the Commission's rules require LECs to provide other LECs with nondiscriminatory access to their

directory listings.^{117/} And, as the *UNE Fact Report* establishes, the hardware and software components necessary for operator and directory assistance service are competitively available from multiple vendors.^{118/} Furthermore, there is no reason to believe that economies of scale prevent CLECs from providing operator and directory assistance services. Indeed, CLECs can provide these services from a single nationwide center. Thus, CLECs cannot point to any market failure or monopoly power that prevents them from providing their own operator and directory assistance services.

Second, the empirical evidence of actual market entry shows conclusively that it is possible to provide operator and directory assistance services without unbundled access to an ILEC=s equivalent services. There are literally dozens of providers of retail directory assistance that do not use an ILEC UNE X from interexchange carriers such AT&T to Internet websites such as Bigfoot.^{119/} Among CLECs, some such as MCI WorldCom and McLeod self-provision their own operator and directory assistance services, while others such as ALLTEL, GST, Cox, WinStar, and Omnipoint apparently have found it more advantageous to purchase these services from one of many wholesale providers.^{120/} The *UNE Fact Report* shows that there are at least six

^{117/} See 47 U.S.C. § 251(b)(3); 47 C.F.R. § 51.217(c)(3)(ii).

^{118/} See *UNE Fact Report* at IV-10.

^{119/} See *id.* at IV-1 to IV-6; see also *Petition of U S WEST Communications, Inc. for Competitive Classification of its Directory Assistance Services*, Docket UT-990259, Order Granting Petition (Wash. Utils. and Transp. Comm=n Apr. 28, 1999) (declaring that ILEC=s provision of directory assistance services was subject to effective competition because consumers could choose among 70 alternative providers of such service).

^{120/} See *UNE Fact Report* at IV-2, IV-5.

such wholesale providers, including Excell, Frontier, HebCom, InfoNXX, Metro One, and Teltrust.^{121/} Based on this substantial evidence of competitive market entry, the Commission need not require ILECs to unbundle their operator and directory assistance services anywhere in the nation.

H. Advanced Services X The Commission Should Not Impose Any Unbundling Obligations for Facilities Used Solely in the Provision of Advanced Services.

^{121/} See *id.* at IV-5.

U S WEST does not agree with (and is currently challenging in court) the Commission's determination that the unbundling obligations of section 251(c) apply to advanced services (*i.e.*, high-speed data services as defined in section 706 of the 1996 Act, including but not limited to DSL, ATM, and frame relay services).^{122/} As U S WEST has explained before, these new services are exempt from section 251(c)(3) because they are neither telephone exchange nor exchange access service.

Assuming for the sake of argument that section 251(c) does apply, the facilities used by ILECs solely to provision advanced services do not meet the necessary and impair standard and therefore should not be subject to mandatory unbundling. CLECs have unfettered access to the inputs needed to provide advanced services, and incumbent LECs start off with no residual monopoly power or even a headstart in the provision of these new services. With the advanced services market so open to competition and with the market evidence showing that CLECs are already in the forefront in the provision of these services, mandatory unbundling requirements would only harm competition and consumer welfare. The 1996 Act requires the Commission to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.⁴⁷ U.S.C. § 157 note. In light of this mandate, the Commission should be careful not to dampen ILEC and CLEC investment incentives in this

^{122/} *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 24011 (1998); *appeal docketed, U S WEST Communications, Inc. v. FCC*, No. 98-1410 (D.C. Cir.).

emerging market, yet that is precisely what mandatory unbundling of advanced services facilities would do.

Consider, for example, DSL services. A CLEC needs four basic inputs to provide these services X a conditioned loop, collocation, a Digital Subscriber Line Multiplexer (ADSLAM≡), and a fast-packet or ATM switch. As explained above, U S WEST does not challenge basic unbundling requirements for the local loop, except for high-capacity facilities. Furthermore, the Commission=s existing (and recently strengthened) collocation rules guarantee a CLEC=s ability to place its equipment on ILEC premises.^{1/}

^{123/} See generally *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, First Report and Order and Further Notice of Proposed Rulemaking, FCC 99-48, && 18-60 (rel. Mar. 31, 1999).

The other necessary inputs for DSL services X DSLAMs and packet switches X are freely available at market prices from sources other than incumbent LECs, which have no bottleneck control over such items. Multiple major vendors supply DSL equipment,^{124/} and U S WEST itself buys its DSL equipment from outside suppliers. As Commissioner Ness has noted, A[t]he evolving DSL equipment necessary to carry high-speed digital signals on properly conditioned local loops is available to both the ILECs and the CLECs. So is the associated multiplexing and routing/switching equipment necessary to create advanced high-speed data communications services.^{125/} Furthermore, DSL equipment generally is scalable, allowing CLECs to provision such equipment in small quantities without suffering from any significant cost disadvantage. DSLAMs, for example, require only a small initial investment and can be purchased at nearly constant per-unit costs. Finally, ILECs have no residual advantage or headstart whatsoever in the deployment of these facilities: CLECs and ILECs are entering these markets at the same time and starting with the same zero market share.

Several new entrants have acknowledged that they have no difficulty obtaining the electronics they need to provide advanced services. MCI, for example, has argued:

CLECs can efficiently provide DSL technologies as sufficiently as US WEST and other BOCs. . . . A CLEC can place the DSLAM in a collocated space in the BOC=s CO just as readily as the BOC can place the DSLAM in its own CO. Upfront investment costs to the provider are low.^{126/}

^{124/} See *UNE Fact Report* at VI-26 to VI-27.

^{125/} Speech by Commissioner Ness before the Computer and Communications Industry Association=s 1998 Washington Caucus, Washington, D.C, June 9, 1998 (*available at* <<http://www.fcc.gov/Speeches/Ness/spsn812.html>>, *visited* May 24, 1999).

^{126/} *Petition of U S WEST Communications, Inc. For Relief from Barriers to*

Similarly, Covad CEO Charles McMinn has confirmed that new entrants do not need unbundled access to nonbottleneck advanced services facilities:

We are happy if they [the incumbent LECs] don't provide any of the electronics, let us put our own electronics in place, and charge us an appropriately low charge just for the copper line. . . .

Some members of ALTS . . . would go a little bit further and say that when an ILEC deploys DSL services in a central office, the ILEC must provide the CLEC with access to it. . . . We're not insisting on that.^{1/}

Deployment of Advanced Telecommunications Services, CC Docket No. 98-26, Opposition of MCI Telecom. Corp., at 10 n.3 (filed Apr. 6, 1998).

^{127/} *On the Record: Covad CEO Aims To Make DSL As Pervasive As Current Modems*, Telecom. Reports, at 44 (June 1, 1998).

The most important evidence, however, that advanced services facilities are not needed from ILECs is the market data showing widespread deployment and competition in the advanced services market. As the *UNE Fact Report* makes clear, facilities-based CLECs have formed strategic partnerships with major equipment manufacturers and investors and have deployed DSL equipment on a startling scale.^{128/} These new competitors X many of which have existed only for a few years X now have more DSL equipment deployed and provide DSL service in more cities than ILECs do.^{129/} Furthermore, the same scale of competition is evident in other advanced services such as ATM and frame relay: In these markets, Sprint, MCI and AT&T are among the leading providers. Thus, it would defy all common sense and the market evidence to conclude that ILECs dominate advanced services markets and that access to ILEC facilities is required for competitive entry.

^{128/} See *UNE Fact Report* at VI-19 to VI-24.

^{129/} See *Id.* at VI-22.

Finally, any Commission decision about the unbundling of advanced services facilities cannot ignore the dampening effect that mandatory unbundling would have on the incentives of both CLECs and ILECs to invest and innovate in advanced services technologies, particularly in rural and other high-cost areas. At least if left unfettered by regulation, most investment and innovations by carriers in the foreseeable future is likely to occur in the development and deployment of advanced services. Both Congress X through section 706 X and the Commission have made clear that the roll out of such advanced services is strongly in the public interest. Yet, if ILECs are forced to unbundle their new investments and proprietary innovations, they unquestionably will have less incentive to engage in such investments. As AT&T's chief executive officer has put it, A No company will invest billions of dollars . . . if competitors which have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride in the investments and risks of others.^{130/} Conversely, if CLECs know they can rely on ILEC investments and innovations, they will have diminished incentives to take on the expense and risks associated with such investments. The Commission should be especially sensitive to this effect on incentives in considering the unbundling of advanced services facilities, or its regulations will discourage the roll-out of those services and the development of competition, particularly in rural and other high-cost areas.

The imposition of regulatory unbundling obligations on ILECs will particularly discourage investment and innovation in light of the fact that dominant cable providers such as

^{130/} Speech by C. Michael Armstrong before the Washington Metropolitan Cable Club, Washington, D.C., Nov. 2, 1998 (*available at* <http://www.att.com/speeches/98/981102.maa.html>), *visited* May 25, 1999).

AT&T are rapidly investing in cable modem and related technologies, unfettered by any requirement that they share their facilities with others.^{131/} ILECs will be doubly reluctant to invest in advanced services facilities if they both have to share those investments with CLEC competitors and simultaneously have to compete with dominant cable providers who are not subject to such regulation.

VI. THE COMMISSION SHOULD EMPLOY A VARIETY OF TOOLS TO ENSURE THAT ITS UNBUNDLING REQUIREMENTS WILL BE MODIFIED OVER TIME TO REFLECT RAPIDLY CHANGING MARKET AND TECHNOLOGICAL CONDITIONS.

^{131/} See generally *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Docket No. 98-146, Report, FCC 99-5, && 53-58 (rel. Feb. 2, 1999).

It is undisputed that the telecommunications industry of today will be vastly different tomorrow. Indeed, the pace of change has become exponential. Products that were virtually unheard of five years ago now are attracting billions of dollars of capital investment, and competitors are racing to be the first to market with new services and with old services provided through new technologies. The extraordinary level of CLEC investment since the 1996 Act has created a laboratory in which countless new business plans and network designs are being developed and brought to market. New technologies such as fixed wireless and cable telephony, for example, are already changing assumptions about whether ILEC local loops are natural monopolies. Indeed, Commissioner Powell and many industry analysts have stated a firm belief that innovations will make it feasible [for CLECs] to avoid incumbent facilities, including the venerable last mile.^{132/}

In this dynamic market context, the Commission's unbundling rules cannot remain static. As discussed above, the sharing obligations imposed by section 251(c) entail significant competitive costs. Section 251(d)(2) therefore provides that unbundling requirements will be imposed only where they are truly needed X namely, where residual market power from years of franchised local exchange monopolies effectively precludes competitive entry by an efficient CLEC. Whether and to what extent new entrants are precluded depends X and will continue to

^{132/} Speech by Commissioner Powell before the Association for Local Telecommunications Services, Las Vegas, Nevada, Dec. 2, 1998 (*available at* <http://www.fcc.gov/Speeches/Powell/spmcp819.html>), *visited* May 12, 1999).

depend X on technology and market conditions. No one can predict precisely how markets and technology will evolve, but the *UNE Fact Report* demonstrates that new innovations almost certainly will make entry without access to ILEC elements substantially easier over time. Maintaining unchanged unbundling requirements in the face of such innovations would violate section 251(d)(2) and serve no purpose other than to distort market incentives.

In this proceeding, therefore, the Commission should affirmatively state that its unbundling requirements will terminate when an element no longer meets the necessary and impair standards. The Commission also should establish procedures and mechanisms to ensure that the requirements are modified without unnecessary delay or regulatory proceedings. Modifying its unbundling requirements would not require the Commission to forbear from enforcing section 251(c).^{133/} Quite the contrary. The modification of unbundling requirements X whether by automatic sunseting mechanisms or through direct Commission order X is *required* by section 251 as market and technological conditions change. Section 251(d)(2) mandates that the Commission enforce section 251(c) by requiring unbundling only for those elements that satisfy the necessary and impair tests. When the Commission orders such elements to be unbundled, it is *enforcing* section 251. Similarly, the Commission also is enforcing section 251 when it removes an unbundling requirement because an element no longer meets the section 251(d)(2) criteria. Modifying unbundling requirements does not constitute Aforbearance≡ any more than a decision now not to unbundle an element pursuant to the Court=s mandate constitutes forbearance.^{134/}

^{133/} See 47 U.S.C. § 160(d).

^{134/} As another example of the principle that regulatory obligations may change as

Presumptions. The primary means for adjusting the Commission's unbundling requirements should be the presumption system outlined above. Rulemaking proceedings inevitably take time and require both the government and private parties to expend significant resources. However, by using presumptions based on objective market criteria as discussed above in Part III, the Commission could save those resources and speed the deregulatory process. Such presumptions not only would give states a limited flexibility to adjust unbundling requirements in response to specific local market conditions, they also would *automatically* adjust regulatory obligations as market conditions change. If, for example, the Commission adopts a presumption that switches must be unbundled only in rate centers that are not within 50 miles of a CLEC switch, the deployment of the first CLEC switch within that radius would cause the unbundling presumption to change automatically, without the intervention of the Commission. The procompetitive purposes of section 251(d)(2) should not be defeated by regulatory delay, and a

market conditions change, consider the Commission's reclassification of AT&T as a nondominant carrier in 1995. *See Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271 (1995). That action removed AT&T from the scope of certain obligations under section 214 of the Act, *see id.* at 3281 & 12, but no one claims that the Commission was *forbearing* from the enforcement of section 214. (Indeed, the Commission did not even have forbearance authority until section 10 was added to the Act in 1996.) The modification of AT&T's section 214 obligations was X like the modification of unbundling obligations discussed above X simply the effect of the Commission *enforcing* the Act under new

presumption-based unbundling regime guarantees that regulations will be eliminated as soon as competitive conditions warrant.

market conditions.

Petitions. ILECs also should be free to petition the Commission to modify its unbundling obligations to reflect new technological and market conditions. The Commission should consider such petitions on an expedited basis, especially if it has adopted uniform unbundling rules rather than presumptions based on objective market criteria. As noted, such a presumption-based system has a built-in capacity to calibrate unbundling requirements to current conditions. By contrast, uniform unbundling requirements have no means of adjusting to the ongoing, rapid changes in the telecommunications industry short of direct Commission action. Thus, to be faithful to the limiting standard contained in section 251(d)(2), the Commission should commit sufficient resources to ensure prompt action on petitions requesting modification of unbundling rules. In such proceedings, a petitioning ILEC and its supporters would have the burden of making a *prima facie* case that technological and market changes have made inapplicable the Commission=s original rationale for its unbundling rule (or presumption). CLECs then would have the burden of rebutting that showing with relevant market evidence, to which, as discussed above in Part III, they have the best access. If the CLECs fail to present such evidence, the unbundling requirement would be lifted or modified as appropriate.^{1/}

Periodic Review. Furthermore, the Commission should, on its own motion, systematically reconsider its unbundling regime every eighteen months to ensure that its underlying assumptions still hold true. Such comprehensive Commission proceedings would

^{135/} ILECs should be allowed to make such a petition after the implementation of the Commission=s new unbundling rules and without regard to the section 271 process. As discussed above in Part II, the unbundling obligations of sections 251 and 271 are logically independent.

allow the Commission to review the broader changes in telecommunication markets better than it presumably could in proceedings based on narrower, individual petitions regarding unbundling requirements.

Transitional Mechanisms. Finally, it is important to note that the modification of unbundling requirements could be accomplished without any harmful market disruptions because the Commission is free to adopt mechanisms to ease the transition to new unbundling rules. For example, if and when an unbundling requirement is modified X either by a change in a presumption=s application or by direct Commission action X the Commission could require ILECs to grandfather existing unbundled elements subject to that requirement for one year under any interconnection agreements then in force. Such a procedure would not disrupt existing CLEC operations and would give a CLEC a reasonable period of time to provide its own elements or to negotiate with the ILEC for a *voluntary* unbundling agreement.^{1/} However, after an unbundling requirement has been modified, CLECs would not be allowed to demand any new installations of the element at TELRIC prices, and *new* interconnection agreements would not be subject to the old unbundling requirement. Furthermore, competitors should no longer be allowed to invoke the pick-and-choose rule regarding that element. Without this limitation, old unbundling requirements could live on indefinitely, as one CLEC could demand unbundling terms from

^{136/} A one-year period would give CLECs a full construction season in which to deploy their own facilities, many of which require far less time to deploy. *See, e.g., UNE Fact Report* at I-29 to I-30 (citing evidence that CLECs can deploy switches in less than 7 months).

agreements reached under the old unbundling rules, and that new agreement would form the basis for further CLEC demands in the future, and so forth.

CONCLUSION

The Commission should adopt the principles, presumptions, and other mechanisms described above to implement section 251(d)(2) of the 1996 Act. Submitted as an attachment hereto is the text of proposed rules designed to embody these mechanisms.

Respectfully submitted,

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The following two attachments were filed with the Commission in hard copy form:

TAB A X Proposed Rules

TAB B X *Market Analysis of the Competitive Local Exchange Carriers and Unbundled Network Elements*, prepared by de Fontenay, Savin & Kiss, May 26, 1999.